Hybrid Conference

17TH Asia Pacific Congress of Pediatrics

10th - 13th March, 2022 and

7TH Asia Pacific Congress of Paediatric Nursing

12th - 13th March, 2022

Theme:
Every New Born, Every Child, Every Where

NURSING SESSION CONGRESS BOOK

Contents

The 7th Asia Pacific Congress of Paediatric Nursing

Advisors

Dr. Naveen THACKER
President-Elect, International Pediatric Association
Past President, Asia Pacific Pediatric Association

Dr. CHAN Chok Wan
Past President, International Pediatric Association
Honorary President, Asia Pacific Pediatric Association
Honorary Adviser, The Asia Pacific Paediatric Nurses Association

Prof. Iqbal MEMON
Chairman, Organizing Committee, The 17th Asia Pacific Congress of Pediatrics
President-Elect, Asia Pacific Pediatric Association

Dr. Zulkifli ISMAIL
Secretary General, Asia Pacific Pediatric Association
Past President, Asia Pacific Pediatric Association

Prof. Masood SADIQ
Vice Chancellor, University of Child Health Sciences,
The Children's Hospital
Lahore, Pakistan

7th Asia Pacific Congress of Paediatric Nursing

organized by The Asia Pacific Paediatric Nurses Association

12 and 13 March 2022

Theme:

Every New Born, Every Child, Every Where

Webinar

President Message

President of The Asia Pacific Paediatric Nurses Association (APPNA)

Dear Colleagues and Friends

On behalf of The Asia Pacific Paediatric Nurses Association (APPNA), it is my great honor to welcome you all to the 7th Asia Pacific Congress of Paediatric Nursing (APCPN) which will be held on 12 and 13 March 2022 online, and hands on workshops will be conducted in Pakistan locally. The 7th APCPN is organized by The APPNA and nurse representative from the University of Child Health Sciences and the Children's Hospital, Lahore, Pakistan. The theme is: *"Every New Born, Every Child, Every Where"*.

The APPNA is inaugurated in 2012 in the 14th Asia Pacific Congress of Paediatrics at Sarawak, Malaysia with Dr. Susanna LEE elected as the founding president. It is the 10th anniversary of The APPNA this year. The APPNA is the international professional organization representing Paediatric nurses in the Asia Pacific Region. The APPNA is committed to promote and advocate child health, to promote excellence in Paediatric nursing and to deliver highest standard of care to children and families. Now we have 8 countries or regions joining the association, namely, 1) Hong Kong Paediatric Nurses Association; 2) Australian College of Children and Young People's Nurses, 3) Chinese Nursing Association - Pediatric Nursing Committee, 4) Indonesia Paediatric Nurses Association, 5) Japanese Society of Child Health Nursing, 6) Mother and Child Nurses Association of the Philippines, 7) Paediatric Nurses Association of Thailand, and 8) Singapore Nurses Association - Paediatric and Neonatal Chapter.

For academic activities, The APPNA will hold the Asia Pacific Congress of Paediatric Nursing (APCPN) concurrent with the Asia Pacific Congress of Pediatrics (APCP) every 3 years. In 2022, The APPNA will hold the 7th APCPN collaboratively with the 17th Asia Pacific Congress of Pediatrics (17th APCP). This congress is aimed to sharing the knowledge and experiences in caring for the children and families in Asia Pacific region. The optimal goal of the congress is to improve quality of nursing care for children and family, also during the COVID-19 pandemic.

In this occasion, I would like to thank The Asia Pacific Pediatric Association (APPA), The Pakistan Pediatric Association (PPA) for their strong support and the University of Child Health Sciences and the Children's Hospital, Lahore, Pakistan for the best collaboration as the host country and to all organizing committee members for their dedicated efforts in making this congress a successful experience.

We would like to invite you to join our congress and submit your abstract for oral or poster presentation at email: 7apcpn2022@gmail.com. For more information, please visit www.ap-pna.com or www.apcp-pak.live.

We look forward to seeing you in the 17th APCP and 7th APCPN. Hope you find the congress fruitful, informational and enjoyable. Thank you.

Sincerely yours

Prof. CHEN Jianjun
President, The Asia Pacific Paediatric Nurses Association (The APPNA)
Chairman, Organizing Committee, the 7th Asia Pacific Congress of Paediatric Nursing (7th APCPN)

The Birth of The Asia Pacific Paediatric Nurses Association (APPNA) at the 14th Asia Pacific Congress of Paediatrics and the 4th Asia Pacific Congress of Paediatric Nursing

With the immense support and invaluable guidance from Dr. Chan Chok Wan, Immediate Past President of International Pediatric Association (IPA), Honorary President of APPA, and the effort of Steering Committee of The Asia Pacific Paediatric Nurses Association (APPNA), The APPNA was born on 10th September 2012. The inauguration was formally held at the 14th Asia Pacific Congress of Pediatrics and 4th Asia Pacific Congress of Pediatric Nursing in Kuching, Sarawak, Malaysia. The election of Office Bearers and Council Members was taken place. Ms. Susanna Lee was elected as the First President of APPNA from 2012 to 2016.

The inauguration ceremony was proudly officiating by Dr. Zulkifli Ismail, President of APPA and Dr. Mohd Sham Kasim, Secretary General of APPA and Dr. Chan Chok Wan. At its inception, membership of The APPNA included Hong Kong Paediatric Nurses Association, Japanese Society of Child Health Nursing, Pediatric Nurses Association of Thailand and Australian College of Children and Young People's Nurses, the Secretariat was decided to be stationed in Hong Kong. The APPNA grew into 7 members in 2015, 3 more countries joined APPNA namely Paediatric and Neonatal Chapter of Singapore Nurses Association, Mother and Child Nurses Association of the Philippines and the Chinese Paediatric Nursing Committee under Chinese Nursing Association.

Current Member Associations of The APPNA

1. Hong Kong Paediatric Nurses Association
2. Japanese Society of Child Health Nursing
3. Paediatric Nurses Association of Thailand
4. Australian College of Children and Young People's Nurses
5. Paediatric and Neonatal Chapter of Singapore Nurses Association
6. Mother and Child Nurses Association of the Philippines
7. Chinese Paediatric Nursing Committee under Chinese Nursing Association
8. Indonesia Paediatic Nurses Association

Mission

The primary objectives of The APPNA are to promote highest attainable standards of child health, to enhance professional growth of paediatric nurses, to provide a platform to share information among paediatric nurses in the Asia Pacific Region, to advocate for the universal rights of children, to act as a unified voice in addressing major global child health issues, to promote nursing research and to collaborate with national, regional and international bodies with similar objectives in promoting the health and development of children. Triennial Asia Pacific Congress of Paediatric Nursing in collaboration with The Asia Pacific Congress of Pediatrics would be conducted for professional solidarity and fraternity with the pediatricians as set out in its Constitution.

10th Anniversary

2022 is the 10th Anniversary of the Asia Pacific Paediatric Nurses Association, let's celebrate the Anniversary and wish The APPNA very success in the future endeavor

The Asia Pacific Paediatric Nurses Association (APPNA)

Advisory Board

Dr. Chan Chok Wan
Honorary Adviser, The APPNA
Past President, International Pediatric Association
Honorary President, Asia Pacific Pediatric Association (APPA),
Board Chairman, Hong Kong Paediatric Foundation

Executive Committee

Prof. Chen Jianjun
President, The APPNA,
Chairman, Paediatric Nursing Committee, Chinese Nursing Association, China

Dr. Susanna Lee
Founding President and Secretary General, The APPNA;
Hong Kong SAR, China

Ms. Khoo Shi Min
President Elect, The APPNA;
Chairman, Paediatric and Neonatal Chapter, Singapore Nurses Association, Singapore

Ms. Connie Tse
Treasurer, The APPNA,
Hong Kong SAR, China

Asso. Prof. Rashanee Seeda
Immediate Past President,
The APPNA President, Paediatic Nurses Association of Thailand, Thailand

Dr. Nani Nurhaeni
Council of Delegate, The APPNA;
President, Indonesia Paediatric Nurses Association, Indonsesia

Asso. Prof. Yvonne Parry
Council of Delegate, The APPNA;
Chairperson, Australian College of Children and Young People's Nurses, Australia

Prof. Reiko Kato
Council of Delegate, The APPNA;
Director, International Exchange, Japanese Society of Child Health Nursing, Japan

Ms. Ada Chan
Council of Delegate, The APPNA;
President, Hong Kong Paediatric Nurses Association,
Hong Kong SAR, China

Mr. Erickson Feliciano
Council of Delegate,
The APPNA; Adviser, Mother and Child Nurses Association of the Philippines, Philippines

7th Asia Pacific Congress of Paediatric Nursing

The Organizing Committee

Prof. Chen Jianjun
Organizing Committee Chair

Dr. Susanna Lee
Liaison and Planning Committee Chair

Ms. Farah Batool
Nursing Program Coordinator (Pakistan)

Prof. Yu Liping
Scientific Committee Chair

Ms. Catherine Marron
Logistic Committee Chair

Mr. Erickson Feliciano
Sponsorship Committee Chair

Ms. Connie Tse
Treasurer

Asso. Prof. Rashanee Seeda

Prof. Reiko Kato

Ms. Ada Chan

Ms. Khoo Shi Min

Dr. Nani Nurhaeni

Asso. Prof. Yvonne Parry

Ms. Nazia Kanwal

Ms. Dilnasheen Safdar

Ms. Carol Lo
(Website support)

Prof. Zheng Xianlan

Moderators

Ms. Aileen Ongleo

Ms. Melissa Rose G. Bernardo

Ms. Tyona Marie R. Gesite

Keynote Speakers

Prof. Chen Jianjun
Dr. Naveen Thacker
Dr. Ma. Theresa G. Vera
Ms. Fiona Smith
Prof. Qian Xiao
Mr. Sharon Levy

Plenary Speakers

Dr. Susanna Lee
Mrs. Rehana Punjwani
Ms. Thochaporn Tesail
Mr. Tanzeel-ur-Rehman
Dr. Nani Nurhaeni
Prof. Yu Liping
Mr. Roderick Napulan
Dr. Yvonne Parry
Mrs. Asiya Khanam
Ms. Tang Sze Kit
Ms. Chan Sin Yee
Ms. Khoo Shi Min
Prof. Zheng Xianlan
Ms. Kainat Asmat
Ms. Meshal Margrate
Dr. Lisa Reid
Ms. Goh Cheng Pheng Esther
Ms. Zhuang Yiyu
Dr. Ng Sze Ka
Prof. Reiko Kato
Prof. Yumiko Nakamura
Mr. Erickson Feliciano
Ms. Pang Nguk Lan

Moderators

Ms. Aileen Ongleo
Ms. Melissa Rose G. Bernardo
Ms. Tyona Marie R. Gesite

7th Asia Pacific Congress of Paediatric Nursing

Cum 10th Anniversary of The APPNA

Day One

Theme "Every New Born, Every Child, Every Where"

12 Mar and 13 Mar 2022 (Saturday and Sunday)

9 am – 5 pm (PST+5GMT) (Pakistan time)

Webinar

Opening Ceremony

(Day 1) 12 March 2022 (Saturday) 9:00am - 9:40am	
Opening Ceremony	
09:00-09:05	Recitation of Holy Quran
09:05-09:10	National Anthem
09:10-09:15	Introduction of The Asia Pacific Paediatric Nurses Association (APPNA) – Dr. Susanna LEE and Ms Farah BATOOL
09:15-09:20	Welcome remarks by Prof. CHEN Jianjun, Chairman, organizing committee, 7th APCPN; President, The Asia Pacific Paediatric Nurses Association (APPNA)
09:20-09:25	Welcome remarks by Prof. Iqbal Abmad MEMON, Chairman, Organizing Committee 17th APCP, President Elect, Asia Pacific Pediatric Association (APPA)
09:25-09:30	Address by Prof. Masood SADIQ, Guest of Honor, Vice Chancellor, University of Child Health Sciences & The Children's Hospital, Lahore, Pakistan
09:30-09:35	Congratulatory remarks by Dr. Naveen THACKER, President Elect, International Pediatric Association
09:35-09:40	Congratulatory remarks by Ms Rehana ELAHI, Director of Nursing, Shaukat Khanum Memorial Cancer Hospitals. Lahore- Pakistan. Member of Prime Minister Health Task Force Memorial Cancer Hospitals. Lahore- Pakistan. Member of Prime Minister Health Task Force

Day One 12 March 2022 (Saturday) 9:00am - 5:00pm

09:00-10:15	**Opening Ceremony**	**Master of Ceremony: Ms Aileen ONGLEO, President, MCNAP**		
10:15-10:20	Break & e-Poster Viewing (Virtual)			
	(Virtual) Nursing Session Hall A		**HANDS ON WORKSHOP (Lahore, Pakistan)**	
	Moderator: Ms Aileen ONGLEO			
Time	**Topic**	**Speaker**	**Topic**	**Speaker**
10:20-10:50	**KEYNOTE I** **All for Child's Health**	**Prof. CHEN Jianjun** *President, The APPNA; Chairperson, Paediatric Nursing Committee, Chinese Nursing Association*	09:30-11:30 **WORKSHOP I** **Hands - on practice to handle Chemotherapy Agents in Pediatrics**	**Facilitator:** **Dr. Nasir BUKHARI** **Ms. Dilnasheen SAFDAR** *Nurse manager, Bone Marrow Transplant Department, University of Child Health Sciences & The Children's Hospital, Lahore, Pakistan*
10:50-11:20	**KEYNOTE II** **Omicron: What We Know and What We Need to Do and COVID-19 Vaccination for Children**	**Dr. Naveen THACKER** *President Elect, International Paediatric Association (IPA); Secretary, Children Foundation*		
	PLENARY SESSION I – COVID-19 in Children in the Asia Pacific Region			
11:20-11:35	**Impact of COVID-19 on Children in the Asia Pacific Region**	**Dr. Susanna LEE** *Founding President and Secretary General, The APPNA*	11:30-13:30 **Workshop II** **Infection Prevention & Control**	**Facilitator:** **Dr. Aizza ZAFFAR** **Ms. Shahida M. DIN ICN** *University of Child Health Sciences & The Children's Hospital. Lahore-Pakistan*
11:35-11:50	**Psychological Support in Pediatrics**	**Ms. Rehana PUNJWANI** *Manager, Clinical Research Unit, Indus Hospital and Research unit, Karachi, Pakistan*		
11:50-12:05	**Pediatric Nursing Care During COVID-19 Pandemic-Thailand Experience**	**Ms.Thochaporn TESASIL** *Head, Pediatric Nursing Division, Siriraj Hospital, Mahidol University, Thailand*		
12:05-12:20	**Covid-19 current situation in Pediatrics-Pakistan**	**Mr. Tanzeel-Ul-RAHMAN** *Nursing Lecturer, Population Welfare department, Lahore, Pakistan*		
12:20-12:35	**Parents' Knowledge and Attitude towards COVID-19 in Children: Indonesian Study**	**Dr. Nani NURHAENI** *Council of Delegates, The APPNA President, IPNA, Indonesia*		
12:35-12:50	**Investigation on Screen Time and Psychosocial Problems of Preschoolers during the prevalence of COVID-19**	**Prof. YU Liping** *School of Nursing Wuhan University, China*		
12:50-13:05	**Childbirth Projection in Philippines Health Facilities: Impact of COVID-19 pandemic**	**Mr. Roderick NAPULAN** *Director IV Department of Health, Philippines*		
13:05-13:25	**Panel Discussion** **Roles of Paediatric Nurses in combating COVID-19 Pandemic in the Asia Pacific Region (ALL SPEAKERS)**			
13:15-14:00	Lunch break and e-Poster viewing (Virtual)			

Day One 12 March 2022 (Saturday) 9:00am - 5:00pm

	Virtual (I) Nursing Session Hall A		Virtual (2) Nursing Session Hall B		
	Moderator: Ms. Melissa Rose G. BERNARDO				
Time	**Topic**	**Speaker**	**Scientific Program**	**Topic**	**Speaker**
14:00-14:30	**KEYNOTE III** **Enhancing Access to Neonatal Care Specialty Services**	**Dr. Ma. Theresa G. Vera** *MD, MSc, MHA, CESO III Director IV, Health Facility Development Bureau, Department of Health Philippines*	**FREE ORAL PAPER PRESENTATION** • COVID-19 and disaster in pediatric nursing • Pediatric Nursing Practices (neonatal, emergencies, acute, critical and chronic care) • Primary health care and community health nursing • Nursing education and research • Quality and safety in paediatrics	14:00-16:30 **WORKSHOP III** **Palliative Care in Pediatrics**	**Facilitator:** **Dr. Mahwish FAIZON** **Ms. Amna HABIB/CCLG** *Clinical Nurse Educator, University of Child Health Sciences & The Children's Hospital. Lahore-Pakistan*
14:30-15:00	**KEYNOTE IV** **Global, Regional and Local Issues: Opportunities for Paediatric Nurses**	**Ms Fiona SMITH** *Honorary Fellow, Royal College of Pediatric and Child Health, United Kingdom; Former Royal College of Nursing Adviser in Children and Young People's Nursing UK; Former Coordinator, Paediatric Nursing Association of Europe Network*			
	PLENARY SESSION II – Paediatric Nursing in the Asia Pacific Region				
15:00-15:15	**Paediatric Nursing in Australia - The Future**	**Dr. Yvonne PARRY** *Council of Delegates, The APPNA President, The Australian College of Children and Young People's Nurses, Australia*			
15:15-15:30	**Current Challenges and Issues in Paediatric Nursing in Pakistan**	**Ms. Aasiya KHANUM** *Nursing faculty, post graduate college of nursing, Lahore-Pakistan*			
15:30-15:45	**Pediatric Nephrology Nursing in Hong Kong SAR: Past, Present and Future**	**Ms. TANG Sze Kit** *Representative of Council of Delegates The APPNA; President Elect, Hong Kong* Paediatric Nurses Association, Hong Kong SAR			
15:45-16:00	**A Rare Disease in Neonate**	**Dr. CHAN Sin Yee** *Nurse Consultant (Neonatal Care); Kowloon Central Cluster and Queen Elizabeth Hospital, Hong Kong SAR*			

Day One 12 March 2022 (Saturday) 9:00am - 5:00pm

Time	Topic	Speaker
16:00-16:15	**Maternal and Child Health: An Inseparable Dyad**	**Ms. KHOO Shi Min** *President Elect, The APPNA; Chairman of Paediatric and Neonatal Chapter, Singapore Nurses Association, Singapore*
16:15-16:30	**Pain Management Strategies in Neonate: Systematic Review**	**Prof. ZHENG Xianlan** *Steering Committee Member, The APPNA; Professor in Nursing, Children's Hospital of Chongqing Medical University, China*
16:30-16:45	**Parenting a Child with Chronic Illness**	**Ms. Kainat ASMAT** *PhD Student, Tameer-e-Milat University, Islamabad, Pakistan*
16:45-17:00	**Role of Pediatric Nurse in the Provision of Psychological Support to Parents**	**Ms. Meshal MARGRATE** *Principal, Akhter Saeed College of Nursing, Lahore-Pakistan*

Day One

KEYNOTE I - Speaker

Topic: All for Child's Health

Prof. Chen Jianjun

President, The Asia Pacific Paediatric Nurses Association (APPNA)

Prof. Chen Jianjun is the President of The APPNA. She is also the Chairman of pediatric Professional Committee of Chinese Nursing Society; Chairman of nursing branch of cross strait medical and Health Exchange Association. Member of nursing group of women's and children's health care Branch of China Association for the promotion of international exchanges in health care and Editorial board of Chinese Journal of nursing

KEYNOTE II - Speaker

Topic: Omicron: What we know and what we need to do and COVID-19 Vaccination for Children

Dr. Naveen Thacker

President, Elect, International Paediatric Association

Dr. Naveen Thacker is a well-known Pediatrician of Gandhidham, is the Director of Deep Children Hospital & Research Centre at Gandhidham-Kutch, Gujarat, India and an Adjunct Professor of Pediatrics at Pramukhswami Medical College, Karamsad Anand, Gujarat, India. He is President-Elect of the International Pediatric Association (IPA) for the year 2021-2023 and Secretary of Child Health Foundation. He is a former President of Asia Pacific Pediatric Association (APPA) for the year 2016-18 and the National President of Indian Academy of Pediatrics (IAP) for the year 2007. He served as a CSO representative on Gavi Board for 4 years. He is also currently member of Covid-19 Vaccine Immunization Task Force Member, Gujarat Government

Pneumococcal Expert group of Ministry of Health and Family Welfare, Government of India and Indian Expert Advisory Group on Measles and Rubella. His current interest is in the area of Vaccine Hesitancy and he is leading the IPA Vaccine Trust Project. He also has served as a Steering Committee Member of Immunization Partners of Asia Pacific (IPAP) for the year 2017- 2019. He is listed amongst the top influencer for the fight against Polio released by UNICEF on World Polio Day 2017 and has been awarded some prestigious awards i.e., Outstanding Asian Pediatrician Award 2012, Rotary International Regional Award for Polio-free World 2010, Rotary Ratna Award District 3050, 2010, and last but not the least prestigious FIAP award. President Elect International Paediatric Association (IPA).

KEYNOTE III - Speaker

Topic: Enhancing Access to Neonatal Care Specialty Services

Dr. Ma. Theresa G. Vera

MD, MSc, MHA, CESO III; Director IV, Health Facility, Development Bureau, Department of Health. Philippine

Dr. Ma. Theresa G. Vera is currently the Director IV - Health Facility Development Bureau. She sets strategic direction, directs formulation of plans, policies, programs, standards and systems. She exercises authority on health facilities development. Exercises supervision and control over the operation of the office. In 2018, she has been the Director IV- Health Human Resource Development Bureau. She managed the technical and administrative functions of the Bureau and influenced partnership formation with stakeholders. Provides direction and focus during change process. Dr. Vera was the Director IV/III- Procurement Service/ Central Office Bids and Awards Committee (COBAC) Secretariat from 2009-2018.

Dr. Vera ensured the implementation of the Government Procurement Reform Act in the DOH and provided guidance in the development of policies and other developmental activities on procurement. Networks with offices within and outside the DOH.

KEYNOTE IV - Speaker

Topic: Global, Regional and Local Issues: Opportunities for Paediatric Nurses

Ms. Fiona Smith

Ex-Adviser and Professor Lead in Children and Young People's Nursing, Royal College of Nursing, United Kingdom

Ms. Fiona Smith has worked in Paediatric Nursing for over 40 years. She was the Advisor and professional lead for children and young people's nursing at the Royal College of Nursing in the UK for 20 years. (retiring from the post in 2020). The role involved advising over 500,000 members about professional nursing practice across the UK and those working internationally, setting professional service standards, influencing politicians and national and UK policy, as well as European standards about service provision and in the care of neonates, children and young people. Fiona led the publication of many Royal College of Nursing standards, including for example that related to safe staffing levels for neonatal and children's nursing (Defining staffing levels in children and young people's services) which are still used today by service inspection bodies such as the Care Quality Commission. In 2003 Fiona established the Paediatric Nursing Associations of Europe, acting as the coordinator (chair/president) until Autumn 2018. By 2017 there were over 33 European countries involved, and connections made with many other countries well beyond Europe. Fiona was recognized for her influencing work by paediatricians and made an Honorary Fellow in 2013 by the Royal College of Paediatrics and Child Health.

PLENARY SESSION – COVID-19 IN CHILDREN IN THE ASIA PACIFIC REGION

Plenary Speaker

Topic: Impact of COVID-19 on Children in the Asia Pacific Region

Dr. Susanna Lee

Founding President and Secretary General, The APPNA

Dr. Susanna Lee obtained her Doctoral degree in the University of Hong Kong and Master degree in Chinese University of Hong Kong. She is currently the Chief Nursing Officer (CNO) of Hong Kong Baptist Hospital. She has been the Associate Professor (Nursing Practice) at the University of Hong Kong (2018-2019). She was the CNO of Hong Kong Hospital Authority (HA) Head Office from 2011-2017 and shouldered the leadership role in nursing services operations, nursing specialty development including Paediatrics, and health care management at a corporate level for public hospitals under HA. Dr. Lee is the former Vice President (2015-2021) and now the Honorary Professional Consultant of the Hong Kong Academy of Nursing.

Dr. Lee is the Convenor and contributed greatly in the formulation of core competencies of the Advanced Practice Nurse (APN) in Paediatric Nursing for the "Voluntary Registration Scheme of APN" in the Nursing Council of Hong Kong (NCHK) which has been implemented in 2021. Dr. Lee is the Immediate Past President of Hong Kong College of Paediatric Nursing. She is also the former Chairman of Licensure Examination Sub-committee of Registered Nurse (Sick Children) under NCHK till 2021 for nurses trained outside Hong Kong SAR, China. Internationally, she is the Founding President and current Secretary General of The Asia Pacific Paediatric Nurses Association (APPNA). She established The APPNA in 2012. She is currently the Co-Chair of Student Group of International Council of Nurses (ICN) Nurse Practitioner/Advanced Practice Nurse Network and Health Policy Subgroup ex-member. She was also the Chairman of the Judge Panel of the Hospital Management Asia (HMA) Nursing Excellence Award 2019.

Plenary Speaker

Topic: Psychological Support in Pediatrics during COVID-19

Mrs. Rehana Punjwani

Manager, Clinical Research Unit, Indus Hospital and Research Unit, Karachi, Pakistan

Mrs. Rehana Punjwani is currently working as a free lace Trainer and Program Manager for Pediatric Oncology Nursing training and trainer for Palliative Care Projects. This important role is one she fulfills while being the first nurse enrolled the Global Child Health graduate program at St. Jude Children's Research Hospital Graduate School of Biomedical Sciences. A highly accomplished professional and recipient of Nursing Leadership award from International Society of Pediatric Oncology, First from Asia among one of four nurses from the Global Fraternity in her field. She has worked for over 22 years, with 18 years of expertise in pediatric Oncology nursing, she is passionate about the field and how it can be transformed in Pakistan. She is a founder of the first Pediatric Oncology Nursing Education Department in Pakistan that was initiated in 2009, which has since trained more than 350 nurses from all over the country and 15 international nurses from countries in Asia and Africa. Mrs. Punjwani's dedication and accomplishments in the field of Pediatric oncology extend beyond Indus, she has been part of the International Society of Pediatric Oncology (SIOP) for seven years. Here, she is a member of Scientific and Abstract Review Committee, and reviewer for Grant applications for Sanofil Espoir My child matter nursing grants and has served Pediatric Oncology for developing countries for 3 years as a Co-Chair that is dedicated to improving Pediatric Oncology Nursing In Lower and middle income countries. She was a member elect for Nursing steering committee of SIOP, first south Asian nurse to be elected for this position.

Plenary Speaker

Topic: Pediatric Nursing Care During COVID-19 Pandemic-Thailand Experience

Ms. Thochaporn Tesail

Head of Pediatric Nursing Siriraj Hospital Mahidol University, Thailand

Ms. Thochaporn Tesail has been working in Pediatric Nursing Division for 30 years. Thochaporn started her nursing career in PICU at Siriraj Hospital since 1991. After working for 10 years, she was certified by Mahidol university committee as a Clinical Nurse Expert in Pediatrics Respiratory Care in 1999. She start leadership career in 2013 as a Head nurse (nurse manager) in PICU and develop her expertise in nursing administration, human resource manage and development. At present, assume middle-leadership position as Head of Pediatric Nursing, responsible for implementing hospital strategies and facilitating changes to meet organization's needs and better patient outcomes as well as encourage professional growth in nursing and maintaining work-life balance for nursing staffs in Pediatric Nursing Department.

Plenary Speaker

Topic: Covid-19 current situation in Pediatrics - Pakistan

Dr. Tanzeel Ul Rahman

Nursing Lecturer, Population Welfare Department, Lahore, Pakistan

Dr. Tanzeel Ul Rahman is Nursing Instructor/Trainer at Regional Training Institute, Population Welfare Department, and Government of Punjab. His motto is to cultivate a positive attitude and uplift the esteem of Nursing profession. He has completed his BSN and MSN from University of Health Sciences, Done his M.phil in Public Health from University of Punjab and currently he is a Ph.D Scholar at University of Punjab. He has been best graduate and gold medalist for BSN session 2008-2012 and MSN session 2015-2017 at University of Health Sciences. Previously he has worked in administration of Shalamar Teaching Hospital, Lahore and has been faculty of Shalamar Nursing College. He has also worked as Assistant Director of Training and Research at Directorate of Training and Research, Population Welfare Department Punjab.

Plenary Speaker

Topic: Parents' Knowledge and Attitude towards COVID-19 in Children: Indonesian Study

Ms. Nani Nurhaeni

President, Indonesia Paediatric Nurses Association, Indonesia

Dr. Nani Nurhaeni worked at Cipto Mangunkusumo Hospital and Harapan Kita Children's and Maternity Hospital in 1993-1995. She completed her Master's degree at Memorial University of Newfoundland, Canada. Her dissertation focuses on empowering families for pediatric patients, especially children with pneumonia in the hospital. In the context of the Tri Dharma of Higher Education, she teaches undergraduate, postgraduate, and doctoral students. The courses that facilitate in the Undergraduate Study Program were Nursing Paradigms and Theory, for the Masters Study Program the Concepts of Advanced Childhood, Child Acute Nursing, and Advanced Pediatric Nursing Assessment. She also facilitates master students for Quantitative Research courses, Nursing Ethics and Law, and Nursing Science courses. For doctoral students, she facilitates the Philosophy of Science and Science Methodology Course. Her research fields in pediatrics include infectious diseases, especially pneumonia, growth and development, family empowerment, stunting, and health promotion.

In managerial experiences, she has served as a head of pediatric department, a human resource manager, and a vice dean for non-academic affair Activities in professional organizations beside as a president Indonesian pediatric nurse association (IPNA), she also involved as a team in research and development board in Indonesian Nurses Association (INA). For some nursing journals, she worked as a reviewer.

Plenary Speaker

Topic: Investigation on Screen Time and Psychosocial Problems of Preschoolers during the prevalence of COVID-19

Prof. Yu Liping

School of Nursing, Wuhan University, China, RN, MN

Prof. Yu Liping is the Professor of Wuhan University School of Nursing. She is also the Chairman of Pediatric Professional Committee of Hubei Nursing Society. Member of Pediatric Professional Committee of Chinese Nursing Society; Deputy head of neonatal nursing group. She is also Member of the Standing Committee of the parenting and nursing professional committee of China maternal and Child Health Association; Editorial board of Chinese Journal of nursing education; Executive director of Hubei Nursing Society.

Plenary Speaker

Topic: Childbirth Projection in Philippines Health Facilities: Impact of COVID-19 pandemic

Mr. Roderick Napulan

Director IV, Department of Health, Philippines

Mr. Roderick Manzo Napulan is the Director IV of the Administrative Service of the Department of Health, Philippines. He was the former Chief of the Facility Performance Management Division of the Health Facility Development Bureau, Department of Health. Aside from providing recommendations and strategies for research and evidence-based policies and plans to DOH principal officials, he manages the Division which handles the Green Health Facilities Program, Geriatric Health Facility Program, and Hospital Scorecard, and oversees the implementation of the Health Facility Research and Policy Innovation hub that provides funding support and grants to institutions for the conduct of the operations research.

Mr. Napulan graduated in BS Statistics and Research (cum Laude) at West Visayas State University, trained in Biostatistics, Health Research, Epidemiology, Public Health, Hospital Administration and Management, and Career Executive Service (CES) eligible. Mr. Napulan is also a Professorial Lecturer at West Visayas State University - College of Medicine and University Medical Center, an invited lecturer at University of the Philippines, Associate Editor at the International Journal of Clinical Studies & Medical Case Reports and national adviser of the Philippine Association of Records and Information Officers, Inc. He is an associate member of the National Research Council of the Philippines and has an approved financial grant amounting to 2 million pesos to study the access of government employees to primary health care. Mr. Napulan likewise acts as national adviser of the Philippine Association of Records Information Officers, Inc (PAHRIO). Mr. Napulan has authored and co-authored several national policies, published and presented several researches in both National and International Conferences. Meanwhile, in the practice of his expertise as a statistician and researcher, he has provided statistical and technical inputs to more than 300 researches of undergraduate students, dentistry and medical students, residents, fellows-in-training, and health and other related research projects. Moreover, he has already trained more than a thousand Human Resources for Health in the country in the fields of Planning, Statistics, Health Information Management, Continuous Quality Improvement and Risk Management in his more than nine years of service at the Department of Health.

PLENARY SESSION – PAEDIATRIC NURSING IN THE ASIA PACIFIC REGION

Plenary Speaker

Topic: Paediatric Nursing in Australia-The Future

Dr. Yvonne K Parry

Associate Professor, Flinders University, Australia

Asso. Prof. Yvonne Parry is the Associate Professor of the Flinders University, College of Nursing and Health Sciences Research with international partners seeks to improve the health of infants, children and young people. Yvonne's work exists at the important intersection between nursing, primary health, and public health. Her award-winning research focuses on community and acute care health services for marginalized children and their families. She has over 70 publications, with 28 journal articles, 12 book chapters and 19 ERA eligible reports in the last 10 years.

Associate Professor Parry's research is foundational to her teaching, combining in-depth and extensive collaborative community and acute care research, with quality teaching scholarship informed by practice. She is a productive scholar who has made an outstanding contribution to the field of child health and welfare, specifically child homelessness, since she completed her PhD in 2012. She has led research projects in Noise Levels in NICU, Does ISBAR improve Handover and Family Inclusive Nursing Care? Child and Family Homelessness, Evidence inform Community Programs for at risk Children, Domestic Violence Responses for Elderly Women, and in the Impact of Disaster on Families, to name a few. This research has informed national and international policy and practice. Importantly a considerable component of her research is translating findings into appropriately developed education and training for service professionals including undergraduate health professionals.

She was appointed as the Chair [President] of the Australian College of Children and Young Peoples' Nurses (ACCYPN). Additionally, she was the Chair of the ACCYPN Credentialing Committee. The ACCYPN is the only national nursing professional organization credentialing children and young people nurses. Yvonne is the inaugural Editor of the Journal of Children and Young People's Health, the official journal of ACCYPN.

Plenary Speaker

Topic: Current Challenges and Issues in Paediatric Nursing in Pakistan

Mrs. Aasiya Khanam

Nursing Instructor, BVH College of Nursing, Pakistan

Mrs. Aasiya Khaname is MSN & M.Phil and Cardiac Care Nursing Specialist. She has also experience as a Pediatric Nurse. She is Gold Medalist Illumini of University of Health Sciences, adjunct faculty of University of Health Sciences; Fatima Jinnah Medical University is also member of board of study in University of Lahore. She is working for the enhancement of student nurses and betterment of nursing profession. She has done research in type 2 diabetes mellitus and control of blood sugar level with diaphragmatic breathing exercises.

Plenary Speaker

Topic: Pediatric Nephrology Nursing in Hong Kong SAR: Past, Present and Future

Ms. Tang Sze Kit

Vice President, Hong Kong Paediatric Nurses Association

Ms. Tang Sze Kit is the Vice President of Hong Kong Paediatric Nurses Association. She is also the Hon. Secretary of Hong Kong College of Paediatric Nursing. She obtained her Master of Nursing in 2002. Ms. Tang has vast experiences in Paediatric Intensive Care Nursing and Paediatric Nephrology nursing working in Princess Margaret Hospital. She is now the Ward Manager of Paediatric Nephrology Cente in the Hong Kong Children's hospital in Hong Kong SAR, China

Plenary Speaker

Topic: A Rare Disease in Neonate

Dr. Chan Sin Yee

Nurse Consultant (Neonatal Care), Kowloon Central Cluster, and Queen Elizabeth Hospital, Hong Kong SAR, China

Dr. Chan Sin Yee has been working in Neonatal Intensive Care Unit in Queen Elizabeth Hospital for more than 20 years. She is a nurse expert and now the Nursing Consultant (Neonatal care) of the Kowloon Central Cluster, including Queen Elizabeth Hospital, The Hong Kong Children's Hospital, and Kwong Wah Hospital under Hospital Authority. She is now the Chairman of Education Committee of the Hong Kong College of Paediatric Nursing.

Plenary Speaker

Topic: Maternal and Child Health: An Inseparable Dyad

Ms. Khoo Shi Min

President Elect, The APPNA; Chairman of Paediatric and Neonatal Chapter, Singapore Nurses Association, Singapore

Ms Khoo Shi Min is a senior nurse clinician, and she has been working with children for the past 15 years. Upon completion of her Masters in Paediatric nursing in 2014, she is certified as an Advanced Practice Nurse. She works with children in both the inpatient and primary care setting.

She is engaged in multiple workgroups at both institutional and ministerial levels, developing nursing and maternal child health in Singapore. She is also an adjunct lecturer with the National University of Singapore, grooming future advanced practice nurses. Ms Khoo is the current chairperson of the Paediatric and Neonatal Chapter of Singapore Nurses Association. She is the President-Elect of The Asia Pacific Paediatric Nurses Association.

Plenary Speaker

Topic: Pain Management Strategies in Neonate: Systematic Review

Prof. Zheng Xianlan

RN, Professor and doctoral supervisors in Nursing at Chongqing Medical University, leader of Nursing Academic Technology in Chongqing, China

Prof. Zheng Xianlan is the Chief of Nursing Department, National Research Center for Clinical Medicine (Children's Health and Disease), National Regional Medical Center for Children, Children's Hospital of Chongqing Medical University. She is Steering Committee Member of the Asia Pacific Paediatric Nurses Association. She is also the Vice Chairman of Pediatric Professional Committee of the Chinese Nursing Association, Member of Nursing Branch of Chinese Research Hospital Association; Vice President of Chongqing Nursing Association. Prof. Zheng is the President of Pediatric Professional Committee of Chongqing Nursing Association and Vice President of Administrative Committee of Chongqing Nursing Association.

Prof. Zheng is the Editor of 8 journals, such as International Journal of Nursing Sciences. She approved 17 scientific research projects, including 1 national natural science foundation project, and participated in 14 projects. Won 5 scientific research achievements awards, including 1 provincial award, published more than 100 papers, chief editor or editor of 12 books and textbooks. Leader of Chongqing pediatric nursing tutor team, and Chongqing offline first-class course "Pediatric Nursing", and national clinical key specialist (clinical nursing). Awarded the National Excellent Director of Nursing Department, and Outstanding Nurse of Chinese Nursing Association.

Plenary Speaker

Topic: Parenting a Child with Chronic Illness

Mrs. Kainat Asmat

PhD Student, Tameer-eMilat University, Islamabad, Pakistan

Mrs. Kainat Asmat is an alumna of the University of Health Sciences (UHS) Lahore, where she did her Master of Science in Nursing (MSN) and Bachelor of Science in Nursing (BSN). She also holds degrees in Master of Clinical Psychology and Master in Business Administration (MBA-HRM). Currently, she is enrolled in PhD in Nursing at Shifa Tameer-e-Millat University (STMU), Islamabad. She is now serving as Associate Professor and Principal, School of Nursing, The University of Faisalabad (TUF). Before taking this prestigious position at TUF, she has held various teaching and administrative positions including Principal, Vice-Principal, Assistant Professor and Program Coordinator at renowned nursing institutes of the country. Her areas of research include chronic care management in adult and pediatric population with special focus on self-management in chronic illnesses, patient-and family centered care, coping with caregiving and promoting mental health of caregivers. She has a number of research publications to her name, as well as first-place awards for various oral and paper presentations.

Plenary Speaker

Topic: Role of Pediatric Nurse in the Provision of Psychological Support to Parents

Ms. Meshal Margrate

Principal, Akhter Saeed College of Nursing, Lahore-Pakistan

Ms Meshal Margrate is currently working as Principal at College of Nursing, Akhtar Saeed Medical & Dental College Lahore. Since 2018, she has been working as an Assistant Professor (adjunct faculty) at University of Health Sciences Lahore.

She has many publications in national & international journals. She has also been supervisor and co-supervisor of Master's students. More recently, she has been working on "Psychological changes of Adaptation to Parenthood in Primiparous Women."

Day Two

13 March 2022 (Sunday) 9:00am - 4:30pm

(Virtual) Nursing Session Hall A			HANDS ON WORKSHOP (Lahore, Pakistan)	
09:00-09:05	Recitation of Holy Quran: Ms. Zahida ABBAS			
	Moderator: Ms. Tyona Marie F. GESITE			
Time	**Topic**	**Speaker**	**Topic**	**Speaker**
09:05-09:45	**KEYNOTE V** **Development of Nuring Artificial Intelligence in China**	**Prof. Qian XIAO** *Director Maternal and Pediatric Nursing Department; Deputy Dean, School of Nursing, Capital Medical University, China*	09:00-10:00 **WORKSHOP IV** **Breast feeding**	**Facilitator:** **Dr. Farah HAROON** **Ms. Saraphin REBECCA** *Nurse Manager, University of Child Health Sciences & The Children Hospital, Lahore, Pakistan*
09:45-10:25	**KEYNOTE VI** **Informatics, Digital Health and Transition from Paediatric to Adult services – a Scottish perspective**	**Mr. Sharon LEVY** *CPD Lead, Data Science for Health and Topical Care, United Kingdom*		
	PLENARY SESSION III – NURSE INFORMATICS AND INNOVATION IN HEALTHCARE			
10:25-10:55	**Nursing in the Digital Age: Bridging the Gap between Theory and Practice in Nursing Informatics**	**Dr. Lisa REID** *PHD candidate, Flinders University, Australia*	10:00-11:30 **WORKSHOP V** **Oxygenation & Airway Management in Pediatric Critical Care nursing**	**Facilitator:** **Dr. Bushra SAEED** **Ms. Razia IQBAL** *Critical Care Nurse, University of Child Health Sciences & The Children Hospital, Lahore, Pakistan*
10:55-11:20	**Nursing Informatics in KK Women's and Children's Hospital in Singapore**	**Ms. GOH Cheng Pheng Esther** *Senior Nursing Officer, KK Women and Children's Hospital, Singapore*		
11:20-11:45	**Nursing Informatics in China**	**Ms. ZHUANG Yiyu** *VP for Nursing, Chief Nursing Officer, Sir Run Run Shaw Hospital, Zhejiang University, School of Medicine, China*	11:30-13:30 **WORKSHOP VI** **Care of a Child on Mechnical Ventilation**	**Facilitator:** **Dr. Muhammad SARWAR / Dr. NIGHAT** **Ms Sheeba ASHIQ** *Intensive Care Nurse, University of Child Health Sciences & The Children Hospital, Lahore, Pakistan*
11:45-12:00	**Nurse-Led Web based Asthma Education Program for Children and Family**	**Dr. NG Sze Ka** *Chairman, Young Fellow Chapter. Hong Kong Academy of Nursing, Hong Kong SAR*		
12:00-12:20	**PANEL DISCUSSION** Role of nurses in the development of nursing informatics in Paediatric Nursing			
	PLENARY SESSION IV – COMMUNITY AND DISASTER NURSING			
12:20-12:35	**Preparatory Education of Challenged Children for Natural Disaster Preparedness - The Application of ICT Material**	**Prof. Reiko KATO** *Chairperson of the International Exchange Committee, JSCHN; Professor, Kansai Medical University, Japan*		
12:35-12:50	**Childhood Obesity in Japan**	**Prof. Yumiko NAKAMURA** *Steering Committee Member The APPNA; Professor, Bunkyo Gakuin University, Japan*		

Day Two 13 March 2022 (Sunday) 9:00am - 4:30pm

Time	Topic	Speaker		
	PLENARY SESSION V – QUALITY AND SAFETY IN PAEDIATRIC CARE			
12:50-13:05	**Patient Safety in Paediatric Care in Philippines**	**Mr. Erickson FELICIANO** *Representative of Council of Delegates, The APPNA; Advisor, MCNAP, Philippines*		
13:05-13:20	**Building a High Reliable and a Safety Culture to Achieve Zero Harm**	**Ms. PANG Nguk Lan** *Member, Steering Committee, APPNA; Chief Risk Officer and Director, Quality Safety and Risk Management, KK Women's and Children's Hospital; Deputy Group Director, Institute for Patient Safety and Quality, SingHealth Duke-NUS, Singapore*		
13:20-14:00	Lunch break and e-Poster viewing (Virtual)			
	SCIENTIFIC PROGRAM - FREE ORAL PAPER PRESENTATION Virtual (I) Nursing Session Hall A		**SCIENTIFIC PROGRAM – FREE ORAL PAPER PRESENTATION Virtual (2) Nursing Session Hall B**	
14:00-16:30	• Pediatric nursing practices (neonatal, emergencies, acute, critical and chronic care) • Primary health care and community health nursing • COVID-19 and disaster in pediatrics nursing • Nursing education and research • Quality and safety in Paediatrics		• Pediatric nursing practices (neonatal, emergencies, acute, critical and chronic care) • Primary health care and community health nursing • COVID-19 and disaster in pediatrics nursing • Nursing education and research • Quality and safety in Paediatrics	
16:30-17:00	**CLOSING REMARKS**			

Day Two

KEYNOTE V - Speaker

Topic: Development of Nuring Artificial Intelligence in China

Prof. Qian Xiao

Director, Maternal and Pediatric Nursing Department; Deputy Dean, School of Nursing Capital Medical University, China

Prof. Qian Xiao is a reviewer of 3 Chinese Journals and 3 SCI journals. She is the expert Member of Pediatric Nursing Special Committee of Beijing Nursing Society; Executive Director of Nursing Association, Cross-Straits Medicine Exchange Association; Vice Secretary General of Council of Nursing, Chinese Health Information and Big Data Association (CHIBDA); Deputy Director of Rehabilitation Nursing Professional Committee of China Rehabilitation Association.

KEYNOTE VI - Speaker

Topic: Informatics, Digital Health and Transition from Paediatric to Adult services – a Scottish Perspective

Mr. Sharon Levy

CPD Lead, Data Science for Health and Topical Care, United Kingdom

Mr. Sharon Levy after completing his nurse training, he continued to develop his professional practice in a variety of community-based care environments. His first clinical informatics post, in 1997, was a launching pad to a national leadership role at the Royal College of Nursing (RCN) as the UK informatics adviser - a post he held until 2007. After a short career break abroad, Sharon re-joined the NHS as a Telehealth Nurse Specialist, before joining Edinburgh University, nursing studies department, to lead and direct a number of MSc programmes. He is currently a CPD lead for the Data Driven Innovation (DDI) programme at the Usher.

His main research interests and activities focus on digital health and he actively supports research and development efforts by Spina Bifida Hydrocephalus Scotland.

PLENARY SESSION – NURSE INFORMATICS AND INNOVATION IN HEALTHCARE

Plenary Speaker

Topic: Nursing in the Digital Age: Bridging the Gap between Theory and Practice in Nursing

Dr. Lisa Reid

Registered Nurse, Casual Academic, PhD
R.N Cert., GNP, BHSc, BN (Hons), Cert. IV TAE, Prof. Cert. Prac. Ed.

Dr. Lisa Reid is currently the member of Flinders Digital Health Research Centre (FDHRC), Australasian Institute of Digital Health (AIDH), Australian Nurse Teachers Society (ANTS), and the International Medical Informatics Association – Special Interest Group – Students & Emerging Professionals (IMIA –SIG-SEP).

She won many honors, such as Australian Nurse Teacher's Scholarship in 2019, Student Led Teaching Award - Honorable Mention in 2021, and Academic Internship Program for Doctoral Students in 2021.

Plenary Speaker

Topic: Nursing Informatics in KK Women's and Children's Hospital in Singapore

Ms. Goh Cheng Pheng Esther

BSN, RN, Senior Nurse Manager, KK Women and Children's Hospital, Singapore

Ms. Esther Goh is currently the Senior Nurse Manager of KK Women's and Children's Hospital (KKH). She has been in the nursing profession for 22 years, she commenced her career with KKH in 1998. She is a strong advocate of harnessing IT to transform the delivery of quality patient care, nursing operations and nursing education. Since joining Nursing Informatics (NI) in 2010, she has been heavily involved in the implementation and change management of numerous initiatives in KKH's Electronic Medical Record (EMR) system. As key member in Nursing Informatics (NI), Esther constantly looks into improving and simplifying nursing workflows through the incorporation of IT. Ms. Goh was instrumental in transforming nursing operations through the implementation of the following nursing IT-related applications, including nurse charting, clinical documentation and IT downtime improvement. With the successful implementation, patient clinical data can be shared across the healthcare continuum through the integrated EMR system, providing quality healthcare through greater collaboration amongst clinicians and nurses.

Plenary Speaker

Topic: Nursing Informatics in China

Ms. Zhuang Yiyu

RN, MSN, FAAN VP for Nursing, Chief Nursing Officer, Sir Run Run Shaw Hospital, Zhejiang University, School of Medicine, China

Ms. Zhuang Yiyu is currently the Chief Nursing Officer of Sir Run Run Shaw Hospital Zhejiang University School of Medicine. She is the Dean of Zhejiang University City College Nursing and Health School. She is the Doctoral Supervisor of Zhejiang University and the Fellow of the American Academy of Nursing. She is also the Vice president of Zhejiang Nursing Association, Vice Chair of the Intensive Care Professional Committee of the Chinese Nursing Association, and Chair of the Intensive Care Professional Committee of Zhejiang Nursing Association.

Ms. Zhuang Yiyu is the Editor of some journals, such as Chinese Journal of Nursing, Chinese Journal of Nursing Management, and Journal of Nursing Practice and Research.

Plenary Speaker

Topic: Nurse-Led Web based Asthma Education Program for Children and Family

Dr. Ng Sze Ka

Ex-Chairman, Young Fellow Chapter. Hong Kong Academy of Nursing, Hong Kong SAR

Dr. Ng Sze Ka is the former Chairlady of Young Fellow Chapter of Hong Kong Academy of Nursing. She obtained her Doctor of Nursing in the Chinese University of Hong Kong. She has been working in Paediatric Unit and Neonatal Intensive Care Unit in United Christian Hospital in Hong Kong SAR,China for more than 15 years. She received the Best Oral Presentation Award in the Joint Annual Scientific Meeting 2021 organized by Hong Kong Paediatric Society, Hong Kong College of Paediatricians, Hong Kong College of Paediatric Nursing and Hong Kong Paediatric Nurses Association.

PLENARY SESSION – COMMUNITY AND DISASTER NURSING

Plenary Speaker

Topic: Preparatory Education of Challenged Children for Natural Disaster Preparedness - The Application of ICT Material

Prof. Reiko Kato

Chairperson of the International Exchange Committee, JSCHN; Professor, Kansai Medical University, Japan

Prof. Reiko Kato is currently the Chairperson of the International Exchange Committee, JSCHN. She completed her master's and doctoral degree at College of Nursing Art and Science Hyogo in 1999 and 2002, respectively. Subsequently, in 2005, she became a professor in the Department of Nursing, School of Health Sciences, Ibaraki Prefectural University of Health Sciences. In 2018, She also became a professor in the Faculty of Nursing, Graduate School of Nursing, Kansai Medical University.

Plenary Speaker

Topic: Childhood Obesity in Japan

Prof. Yumiko Nakamura

Steering Committee Member, The APPNA; Professor, Bunkyo Gakuin University, Japan

Prof. Yumiko Nakamura received her Ph.D. in nursing from the Graduate School of Nursing at Kitasato University in Japan. She is the steering committee member of The APPNA. She teaches Paediatric Nursing and Family Nursing at the Universities. She was the Associate Professor and Professor of Aomori University of Health and Welfare, School of nursing in 2001 and 2004 respectively, and she is currently the professor of Bunkyo Gakuin University, department of Nursing from 2015 to now.

PLENARY SESSION–QUALITY AND SAFETY IN PAEDIATRIC CARE

Plenary Speaker

Topic: Patient Safety in Paediatric Care in Philippines

Mr. Erickson Feliciano

Representative of Council of Delegates, The APPNA; Advisor, MCNAP, Philippines

Mr. Erickson Feliciano is a Registered Nurse in the Philippines and the State of New York, United States of America. He specialized in Maternal and Child Nursing (MCN) for his Master of Arts in Nursing degree from University of Santo Tomas, Philippines. Mr. Feliciano holds the position of a Development Management Officer IV and Nursing Adviser of the Department of Health – Health Facility Development Bureau. He was a former staff nurse, researcher, and also served as the Chief Nurse of Novaliches General Hospital, Quezon City, Philippines.

Currently, Mr. Feliciano is the Adviser of the Mother and Child Nurses Association of the Philippines, the national specialty organization for maternal and pediatric nursing practice, where he also served previously as the National President. He was a former member of the Board of the Perinatal Association of the Philippines, Inc. (PAP) and sits as Executive Committee Member representing the Philippines in the Asia Pacific Pediatric Nurses Association, the specialty society for pediatric nursing in the Asia Pacific region.

Plenary Speaker

Topic: Building a High Reliable and a Safety Culture to Achieve Zero Harm

Ms. Pang Nguk Lan

Member, Steering Committee, APPNA; Chief Risk Officer and Director, Quality Safety and Risk Management, KK Women's and Children's Hospital; Deputy Group Director, Institute for Patient Safety and Quality, Sing Health Duke-NUS, Singapore

Ms PANG Nguk Lan, a RN with more than 20 years of PICU experience and was awarded President Nurse in 2003 for her professional contribution. She has a Master in Science, Healthcare Management, currently the Director of Quality, Safety and Risk Management and Chief Risk Officer of KK Women's and Children's Hospital. She initiated the Safety and Reliability- Target Zero Harm Program in 2014, and is instrumental in the establishment Patient Safety Network Program, Speaking Up for Safety, and Promote Professional Accountability. At the cluster level, she is appointed as the Deputy Group Director of the Institute for Patient Safety and Quality (IPSQ) SingHealth Duke-Duke -NUS where she co-convened the Team SPEAKTM program in 2017 and Master Trainer. She is also the Senior Program Faculty for Blended Quality Improvement and Root Cause Analysis for workshops convened by IPSQ. Under the Regional Collaborative Training Programs, Ms Pang led and conducted the Quality Improvement Train-the-trainer Workshop in India, Patient Safety and Quality Management Master Trainers Program for Myanmar, and Temasek Foundation -SingHealth Healthcare Leadership & Clinical Governance Project in Malaysia. Ms Pang is also a Certified Enterprise Risk Manager. She has initiated the Enterprise Risk Management (ERM) program in KKH in September 2011 and has successfully incorporated ERM as part of the operational practices throughout the hospital. She also serves as the Consultant to the National Improvement Unit of the Ministry of Health, Singapore, a collaborative of the Institute for Healthcare Improvement (IHI).

Attachment A

(Day 1) 12 March 2022 (Saturday) 9am-5pm 14:00-17:00 NURSE SCIENTIFIC PROGRAM - FREE ORAL PAPER PRESENTATION			
Colloquium sub-themes:	Time	Topic	Speaker
Pediatric nursing practices (neonatal, emergencies, acute, critical and chronic care)	14:00-14:08	Chinese Parents' Experiences of Parental Role Adaptation after their Preterm Infant's Discharge: A Qualitative Descriptive Study	**Jia Li** *School of nursing, Wuhan University, Hubei, China*
	14:08-14:20	Effect of medical game counseling on alleviating medical fear in hospitalized school-age children with malignant tumor	**Yuan Zhang** *The First Hospital of Jilin University, Jilin, China*
	14:20-14:35	Central Line Associated Bloodstream Infections Reduction in Neonatal Intensive Care Unit	**Law Shing Ping** *Prince of Wales Hospital, Hong Kong, Hongkong, China*
	14:35-14:45	Effect of family management style on prognosis of children with complex congenital heart disease after palliative surgery	**XIA YUXIAN** *Shanghai Children's Medical Center, Shanghai, China*
	14:45-14:55	Study on the construction and application of prevention nursing program for delirium in ICU children	**XU TINGTING** *Intensive Care Unit, Shanghai Children's Hospital Shanghai Jiao Tong University, Shanghai, China*
	14:55-15:05	Establishment and efficiency analysis of the risk prediction model predicting the likelihood of bronchopulmonary dysplasia in preterm infants	**SUO Tonghui** *NICU, The First Affiliated Hospital of USTC, Anhui, China*
	15:05-15:13	Nursing care of a newborn with Septic Shock and Persistent Pulmonary Hypertension treated with Extracorporeal Membrane Oxygenation, Continuous Renal Replacement Therapy combined with Plasma Exchange	**Xiaoxia Shi** *Henan Provincial People's Hospital, Henan, China*
	15:13-15:20	Effect of maternal voice combined with cardiac sound stimulation on blood gas index and oxygen therapy duration in children with NICU severe pneumonia on mechanical ventilation	**Luo Dan** *Hunan Children's Hospital, Hunan, China*
	15:20-15:35	Effects of Implementing the Newborn Modified Early Warning Scoring (NEWS) in Neonatal Care	**Euangdoi Tantapong** *Queen Sirikit National Institute of Child Health, Bangkok, Thailand*
	15:35-15:45	The Effect of Educational Program using Cartoon Animation Video for Caregivers of Children with Epilepsy	**Wansa Saeui** *Queen Sirikit National Institute of Child Health, Thailand*
Primary health care and community health nursing	15:45-16:00	Expanding community care for marginalised children: A model of research embedded care delivery	**Yvonne Parry** *College of Nursing and Health Sciences, Flinders University, Australia*
	16:00-16:12	Perceptions and attitudes toward children with attention deficit hyperactivity Disorder of Parents: a Q-Methodological Study	**Li Jiang** *People's Hospital of De Yang, Sichuan, China*
COVID-19 and disaster in pediatrics nursing	16:12-16:25	Barriers affecting the implementation of family-management models by caregivers of children with asthma during the COVID-19 pandemic: A phenomenological qualitative study	**YI Mo** *Shandong University, China*
Quality and Safety in Paediatrics	16:25-16:35	Application of high-reliability organization theory in near-error events in pediatric nursing: A prospective clinical controlled study	**CUICUI** *Children's Hospital of Chongqing medical University, Chongqing, China*
	16:35-16:45	Effect of whole process Management of Mother's Milk with HACCP on extreme / Super premature infants	**BEIEBI LIU** *Women's Hospital of Nanjing Medical University, Jiangsu, China*

Attachment B

(Day 2) 13 March 2022 (Sunday) 9am – 5pm 14:00-15:30 NURSE SCIENTIFC PROGRAM - FREE ORAL PAPER PRESENTATION (Virtual) I			
Colloquium sub-themes:	Time	Topic	Speaker
Pediatric nursing practices (neonatal, emergencies, acute, critical and chronic care)	14:00-14:07	**A simulation training of family management style in children with epilepsy: A randomised clinical trial**	**Zeng Shan** *Department of Pharmacy, Hunan Children's Hospital, Hunan, China*
	14:07-14:17	**Blood culture collecting practices in 93 Chinese hospitals compared with international recommendations for pediatric nurses: a national online survey**	**Qin Yang** *Beijing Children's Hospital, Capital Medical University, National Children's Medical Center, Beijing, China*
	14:17-14:25	**THE INTEGRATED BREAST MASSAGE VERSUS BREAST MASSAGE IN LACTATION FOR LACTATIONAL BLOCKED MILK DUCT TREATMENT: A SINGLE CENTER, STRATIFIED RANDOMIZED CONTROLLED TRAIL**	**NUTCHANAT MUNSITTIKUL** *Pediatric Nursing Division, Department of Nursing, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand*
	14:25-14:33	**Incidence and Risk Factors of Retinopathy of Prematurity, a 10-year Experience of a Single-center, Referral, Hospital**	**Kanya Chutasmit** *Mahidol University, Bangkok, Thailand*
	14:33-14:39	**Effectiveness of narrative exposure therapy in children and young adults with posttraumatic stress disorder: A Meta-analysis**	**Li Huan** *The Second Xiangya Hospital of Central South University, Hunan, China*
	14:39-14:49	**First Nations children and homelessness: Insights from a Nurse Practitioner-led primary health care service.**	**Nina Sivertsen** *Flinders University, Adelaide, South Australia | Arctic University of Norway, Australia*
Primary health care and community health nursing	14:49-15:01	**Construction and evaluation of Nomogram model to predict emotional behavior and internalization problems in school-age children**	**Lina Yin** *People's Hospital of De Yang, Sichuan, China*
	15:01-15:10	**Identification of risk factors of hearing loss in twins babies with different conception methods: a prospective cohort study based on hospitals from 2017 to 2020**	**Wei-dong Wang** *Changsha Hospital for Maternal & Child Health Care Affiliated to Hunan Normal University, Changsha, Hunan, China*
Nursing education and research	15:10-15:20	**Core competencies of pediatric rehabilitation specialist nurses in China: a qualitative study**	**Lin Yuanting** *The Third Affiliated Hospital of Zhengzhou University, Henan, China*
	15:20-15:30	**Effect of Sick Child Role Simulation in Cultural Communication Training of Junior nurse in paediatrics**	**Chen Jinxiu** *Tongji Hospital Affiliated to Tongji Medical College Hust, Hubei, China*

Attachment B

(Day 2) 13 March 2022 (Sunday) 9am – 5pm 14:00-15:30 NURSE SCIENTIFIC PROGRAM – FREE ORAL PAPER PRESENTATION (Virtual) II			
Colloquium sub-themes:	Time	Topic	Speaker
Pediatric nursing practices (neonatal, emergencies, acute, critical and chronic care)	14:00-14:09	**Comparison of the effects of non-nutritive sucking and white noise on preterm infants procedural pain and physiological parameters in a neonatal intensive care unit: A randomized controlled trial**	**Zhenzhen Shao** *Shanghai children's hospital, Shanghai, China*
	14:09-14:21	**The Implementation Status and Influencing Factors of Developing Supporting Care Among NICU Nurses in China**	**Linlin Huang** *Sichuan University West China School of Nursing, Sichuan, China*
	14:21-14:34	**Psychological Health of Primary Caregiver:An Association of Primary caregiver's Stress / Depression with Behaviour severity of Autistic Children**	**Zeenaf Aslam** *KHAYBER MEDICAL UNIVERSITY kpk PAKISTAN*
COVID-19 and disaster in pediatrics nursing	14:34-14:44	**Covid-19 Infection and Risk Assessment of Healthcare Workers at Tertiary Care Hospital: A Retrospective Study Conducted at Karachi Pakistan**	**Arifa khatoon** *Indus hospital and health network, Pakistan*
Quality and Safety in Paediatrics	14:44-14:54	**Establishment of Nomogram model for prediction of intraoperatively acquired pressure injuries in children undergoing brain tumor surgery**	**Qu Hong** *Operation Room,Children's Hospital of Chongqing Medical University, Chongqing, China*
	14:54-15:03	**The Effect of Knowledge Management Program of Nurses for practice on Pediatric Patient with Central Venous Catheters Care Guidelines at Pediatric's Surgical Ward.**	**Chutima Sudprasert** *Queen Sirikit National Institute of Child Health, Bangkok, Thailand*
	15:03-15:11	**Parental experience of transition from Pediatric Intensive Care Unit to a general ward: A Qualitative Study**	**Ji Jian Lin** *School of Nursing, Shanghai Jiao Tong University, Shanghai, China*
Nurse Informatics and Innovation in Health	15:11-15:21	**The present of humanistic care of "portable infusion bag" in transfusion room at pediatric**	**Li Li** *Pediatrics, Renmin Hospital of Wuhan University, Hubei, China*
	15:21-15:30	**Development and usability of a pediatric medication dosage calculation program based on end user computing**	**Jiwen Sun** *Shanghai Children's Medical Center, Shanghai, China*

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Oral Presentation

Section 1: Paediatric Nursing Practice

Chinese parents' experiences of parental role adaptation after their preterm infant's discharge: a qualitative descriptive study

Jia Li[1], Xuena Wang[1], Wenwen Du[2], Liping Yu[1], Cathrine Fowler[3]

[1]School of Nursing, Wuhan University, Wuhan, China
[2]Zaozhuang Vocational College of Science and Technology, Zaozhuang, China
[3]University of Technology Sydney, Sydney, New South Wales, Australia

ABSTRACT

Background: Parenting preterm infants is a challenging task. Successful parental role adaptation is of great significance to the health and development of preterm infants after discharge. However, there is limited evidence about the experience of parental role adaptation after leaving the NICU and how parents perceive this new role, especially in the context of Chinese relatively closed NICU management system.

Method/Content: A qualitative descriptive design was employed. Purposive sampling was used to recruit parents in a preterm follow-up clinic of a tertiary hospital in central China and data were collected by in-depth, face-to-face, semi-structured interviews from March-to-June 2021. Themes were identified by thematic analysis combining with inductive and deductive method. This study followed the consolidated criteria for reporting qualitative research (COREQ).

Results/Outcomes/Findings: In-depth interviews were conducted with 18 parents of preterm infants aged 25-39 years after NICU discharge. Three themes and ten sub-themes emerged from the analysis: (1) Parental role identity- delayed acquisition of parental role, adjust to the parental role, development of paternal/ maternal awareness; (2) Parental role performance- health care, nutritional care, safety care, responsive care, early learning opportunities; (3) Different roles balance- well-balanced roles, role conflict significantly.

Conclusions/Discussion: Parents of preterm infants' parental role adaptation is a dynamic process, including the subjective perception of the parental role, perception on fulfilling the care responsibilities corresponding to the parental role, and interactive experience with other social roles. Chinese parents require a change in policy and clinical practice to ensure opportunities for early parent-infant contact and participation in daily care during hospitalization. Targeted parenting support and interventions are required for parents of preterm infants as they learn to perform parenting tasks and adapt to their parental role after their preterm infant's discharge.

Effect of medical game counseling on alleviating medical fear in hospitalized school-age children with malignant tumor

Yuan Zhang[1], Xin Yu[1]

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ABSTRACT

Background: School-age children suffering from malignant tumors, due to the characteristics of the disease, such as long hospitalization course, more invasive operations, individual poor prognosis, will experience more medical fear and prone to have escape and withdrawal behavior, so as to affect the treatment of the disease. Using the method of medical game counseling, let children understand the common knowledge of diseases related to themselves and the process of medical care, so as to alleviate the medical fear and anxiety caused by treatment of hospitalized children, stimulate the function of self-adjustment of children, promote them to adapt to hospitalized life and improve the treatment compliance better.

Objectives: The purpose of this study was to explore the role of medical game counseling in alleviating medical fear in hospitalized school-age children with malignant tumor.

Method: Self-control method was used. Sixty two school-age children (6-12 years old) diagnosed in the Department of Pediatric Oncology of The First Hospital of Jilin University from January to December 2021 were selected as the research objects. The children's medical fear Survey Scale (CMFs) was used to compare the medical fears of children before and after the intervention of medical game counseling.

Results: The overall score of medical fears in hospitalized school-aged children with malignant tumors was decreased after conducting medical game counseling, especially in "medical operation fears", "fear of human relationships" ($P < 0.05$). However, the level in "medical environment fears" and "fear self" before and after interventions had no significant difference ($P > 0.05$).

Conclusions: The development of medical game counseling is beneficial to alleviate medical fear of hospitalized school-age children with malignant tumors, to improve their treatment compliance and to promote the rehabilitation of children.

Central line associated bloodstream infections reduction in neonatal intensive care unit

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ABSTRACT

Background: Neonates admitted neonatal intensive care units (NICU), especially those born prematurely, usually require insertion of central lines for life-sustaining intravenous infusions and medications. They are vulnerable to central line associated bloodstream infections (CLABSI). CLABSI is one of the major hospital-acquired infections occurred in NICU causing increased neonatal morbidity and mortality, as well as prolonged hospitalization. Overall CLABSI rate in our unit has increased in 2019 and 2020 and this was concerning.

Objectives: The aim was to minimize CLABSI incidence. The objectives were to develop an educational program to nursing staff, to establish a line team, and to develop a comprehensive maintenance checklist.

Method: An education program of CLABSI reduction was organised. A pretest-and-posttest design study was adopted to assess the effectiveness of the CLABSI education program on consolidating colleagues' knowledge, so as to minimize the CLABSI incidence. Furthermore, after reviewing previous CLABSI cases in our unit, the method of central line dressing was standardised, and maintenance care was improved by establishing a "line team". A checklist was developed to facilitate a clearer and comprehensive documentation on central line maintenance care, and to allow early identification of central line abnormalities, such as CLABSI.

Results: The education program was delivered to the NICU nurses. All participants demonstrated improvement in the post-test scores. The checklist was used to review daily line necessity, inspect central line dressing and observe signs of infection. Lastly, the total line days in the intervention period were 301, while there was no CLABSI incident in the intervention period.

Conclusions: To maintain a professional continuous quality improvement program, it is important to expand and improve the program by facilitating staff compliance. Improvement of staff practices and knowledge is of paramount importance. Nurses were encouraged to seek help or advice from the line team members when they have doubts about central line care.

Effect of family management style on prognosis of children with complex congenital heart disease after palliative surgery

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ABSTRACT

Background: The family management style of children with complex congenital heart disease after palliative surgery is not ideal, which directly affects the prognosis of children. Research on family management of these children based on the Family Management Style Framework in foreign countries has achieved certain effects while domestic research is still in its infancy. Therefore, the purpose of this study was to explore the mode of family management after palliation of complex congenital heart disease and evaluate its influence on the prognosis of children.

Method/Content: A cross-sectional survey of 245 families of children with complex congenital heart disease who had been undergone palliative surgery in our center was conducted. Family management measure (FaMM) was used to investigate their family management level, and the outcomes of children with different family management styles were analyzed.

Results/Outcomes/Findings: Four family management styles were identified by cluster analysis. There were the normal-perspective and collaborative (cluster 1,28.57%), the chaotic and strenuous (cluster 2,11.02%), the confident and concerning (cluster 3,21.63%) and the laissez-faire style (cluster 4,38.78%). The pediatric quality of life in cluster 1 was the best, while that of cluster 2 was the worst (73.79±12.22, 59.03±18.70, P<0.01). The unplanned readmission rates of children in cluster 2 and 4 (18.52%. 22.11%) were significantly higher than those of cluster 1 and 3 (4.29%, 3.77%, P<0.001).

Conclusions/Discussion: Different family management styles after palliative surgery of complex congenital heart disease directly affect the prognosis of children. It is suggested the necessity to carry out family-centered nursing model in the long-term management of such children. Health professionals should implement interventions on family management style.

Study on the construction and application of prevention nursing program for delirium in ICU children

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ABSTRACT

Objective: To construct a prevention nursing program for delirium in ICU children and to explore its clinical application effect.

Method: Using the method of literature analysis and expert meeting to construct the prevention nursing program for delirium in ICU children, Using convenience sampling method, 315 ICU children who were admitted to a third-level A children's hospital in Shanghai from February 2020 to July 2020 were selected as the control group, the 309 ICU children admitted from August 2020 to January 2021 served as the test group. The control group used routine care, and the test group used delirium prevention nursing program on the basis of routine care. The differences in the incidence of delirium, mechanical ventilation time, ICU stay, and ICU cost were compared between the two groups.

Results: After intervention, the incidence of delirium in the test group was 15.9% (49/309) , the duration of ICU stay was 4(2.5,7) days, which was lower than that of control group 29.2% (92/315), 5(3,10) days, the difference was statistically significant (P<0.05). There was no significant difference in mechanical ventilation time and ICU hospitalization cost between the test group and the control group (P>0.05).

Conclusions: By constructing and applying a prevention nursing program for delirium in ICU children, the incidence of delirium in ICU children and the duration of ICU stay can be effectively reduced.

Keywords: Intensive Care Unit; Delirium; Intervention; Nursing; Children

Establishment and efficiency analysis of the risk prediction model predicting the likelihood of bronchopulmonary dysplasia in preterm infants

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ABSTRACT

Background: There are few clinically useful and adequately validated predictive model for BPD (bronchopulmonary dysplasia) available at or soon after birth, especially for Chinese population. This study aimed at developing and validating a predictive model for identifying BPD at early stage, and generating a nomogram for clinical use.

Method: The retrospective study developed a well-validated predictive model of BPD among preterm infants less than 32 weeks' gestation by logistic regression, and generated a nomogram subsequently.

Results: This model comprised six variables named gestation age (GA), birthweight, neonatal asphyxia, invasive ventilation, neonatal respiratory distress syndrome (NRDS), and patent ductus arteriosus (PDA). The regression equation was Logit P= (15.209-0.076*GA-1.001*birthweight+0.557* neonatal asphyxia +1.083* invasive ventilation +0.622*NRDS+0.656*PDA). The area under the receiver operating characteristic (ROC) curve of this model was 0.856 (95%CI: 0.812-0.901), with a sensitivity of 81.6% and specificity of 76.8%. Verification of this predictive model showed a sensitivity of 93.5% and specificity of 76.5%, demonstrating that the effects of this model were satisfactory.

Conclusions: This risk prediction model had a good predictive effect for the risk of BPD in premature less than 32 weeks' gestation, and can furnish evidence for preventive treatment and intervention.

Nursing care of a newborn with septic shock and persistent pulmonary hypertension treated with extracorporeal membrane oxygenation, continuous renal replacement therapy combined with plasma exchange

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ABSTRACT

Background: A 2-day-old male born at 39 weeks gestational age with admitted hospitalization for moaning 2 days and hard swelling 8 hours. His diagnosis were septic shock, multiple organ failure and persistent pulmonary hypertension. The blood metagenomic Suggested streptococcus agalactiae infection. Despite mechanical ventilation, inhaled nitric oxide and medication, his urine output still less than 0.5 ml/kg/h, pulmonary artery systolic pressure exceeded 50 mmhg and lactic acid rose to 8.63 mmol/l.

Objectives: This paper reports the treatment and nursing care of a newborn with septic shock and persistent pulmonary hypertension for which he was placed on extracorporeal membrane oxygenation(ECMO), continuous renal replacement therapy(CRRT) combined with plasma exchange(PE).

Methods: He was treated with VA-ECMO combined with CRRT. However, the hyperbilirubinemia was occurred and phototherapy was ineffective. Plasma exchange was performed with the goal of reducing plasma free hemoglobin. Meanwhile, we established central venous catheter access to improve blood perfusion, monitored coagulation function, measured the activated clotting time every 2 hours and maintained it at 180~220s, implemented accurate capacity management and managed all catheters properly to prevent and control infection.

Results: Two plasma exchange were preformed throughout the procedure. Six days later, ECMO and CRRT were successfully removed. He was transferred to the cardiac surgery center for patent ductus arteriosus ligation.

Conclusions: The strategy of ECMO, CRRT combined with PE is feasible in critically ill newborns. The focus of nursing is to monitor coagulation status, strict liquid management, prevention and control infection.

Effect of maternal voice combined with cardiac sound stimulation on blood gas index and oxygen therapy duration in children with NICU severe pneumonia on mechanical ventilation

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ABSTRACT

Background: Mechanical ventilation make noise which is an invasive operation.
Objectives: To investigate the effect of biological maternal sounds with mechanically ventilated patients in the NICU.

Method: From June 2021 to November 2021, patients were selected and divided three group with 32 cases in each group. Group A with routine nursing care without music., group B with mother sounds(MS), group C recorded biological maternal sounds(BMS). Each group listened for 60 minutes two times a day during 7 days.

Results: A total of 10 children were lost to follow-up in the three groups. Finally, 86 children were included in this study, including 28 children in group A, 30 children in group B and 28 children in group C. There were no significant differences in gestational age, age, birth weight, Apgar score, gender, delivery mode, mother's education level and days with mother after birth in the three groups ($P > 0.05$). There were no significant differences in PaO2 and PaCO2 among the three groups ($P > 0.05$), and group C was better than group B in improving the oxygenation ability of children on mechanical ventilation with severe pneumonia. The duration of oxygen therapy was significantly different in the three groups ($P < 0.001$), and group C could shorten the duration of oxygen therapy more than group B.

Conclusions: The two sound stimulation methods of MS and BMS can improve the ability of oxygenation ventilation, Shorten the oxygen treatment time.

A simulation training of family management style in children with epilepsy: a randomised clinical trial

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ABSTRACT

Background: Epilepsy is a chronic brain disease caused by various reasons. At present, the treatment of childhood epilepsy is still a challenging issue. About 1/3 of newly diagnosed children with epilepsy cannot benefit from this treatment, and a major reason is the poor adherence to medication. Epilepsy is a serious threat to children's health and has a great negative impact on children and their families.

Objective: To evaluate the efficacy of a simulation training of family management style (STOFMS) on treatment adherence and management levels in children with epilepsy in China.

Method: This single-centre study recruited 463 children with epilepsy and their family members, who were randomly divided into two groups. Both groups completed a baseline questionnaire prior to the intervention (T0) and were provided with medication adherence monitoring. The intervention group received STOFMS and standard care. The control group received the family management style framework. Both groups underwent an active intervention for 16 weeks and completed follow-up questionnaires at follow-up times of 3 and 6months (T1 and T2). The two groups were compared using repeated-measures analysis of variance on medication adherence, family management level and clinical treatment outcomes.

Results: There were statistically significant differences in medication adherence and family management levels between the two groups at the 3- and 6-month follow-ups. The STOFMS group had significantly improved medication adherence at T1 and T2 compared with the control group. At T1 and T2, there was a significant improvement in the total management level score and subscale scores compared to baseline in the STOFMS group, but almost no change in the control group. In terms of clinical outcomes in children with epilepsy, epilepsy treatment results in the STOFMS group differed from those in the control group at T1 ($p < 0.05$); there was a significant difference at T2 ($p < 0.01$).

Conclusions: STOFMS is an effective intervention to improve treatment adherence and management and clinical therapy results in children with epilepsy; it can also be implemented with routine care.

Comparison of the effects of non-nutritive sucking and white noise on preterm infants procedural pain and physiological parameters in a neonatal intensive care unit: a randomized controlled trial

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ABSTRACT

Background: Pain from heel stick in premature infants has short-and long-term adverse sequelae. Currently pain management includes non-nutritive sucking(NNS), oral breast milk, facilitated tucking, nesting positions, breast milk smell, kangaroo care, oral sucrose, auditory interventions and the combination of two or more approaches. However, white noise is rarely used in premature infants in China, and no study has compared the effects of NNS and/or white noise.

Objective: To compare the effects of NNS and white noise on premature infants in a neonatal intensive care unit (NICU).

Method: This experimental, parallel, randomized controlled trial was conducted in a state hospital tertiary-level NICU. A total of 104 infants were randomly allocated to the NNS group (n=33), the white noise group (n=36), and combined NNS and white noise group (n=35). Heart rate, oxygen saturation, the times of crying and painful face were measured, and pain score was evaluated by two observers using the PIPP-R before, during, and 1 minute after blood sampling by heel stick.

Results: There was a statistically significant difference among the groups in favor of the combined group in terms of change in the PIPP-R values and oxygen saturation during heel stick ($p<0.05$). Significant increases in oxygen saturation during and low PIPP-R scores after heel stick were found in the white noise group and combined groups ($p<0.05$). Significant declines in heart rate were only found between white noise group and NNS groups pre heel stick ($p=0.001$). Non-significant differences were found in the times of crying and painful face among the three groups ($p>0.05$).

Conclusions: Combined white noise and NNS used is more effective for relieving pain and increasing oxygen saturation in preterm infants compared with NNS during and after heel stick procedures. Compared with white noise, the combination method may be more beneficial to reducing pain only during heel stick procedures, while white noise is more useful for relieving pain and increasing oxygen saturation in preterm infants compared with NNS after heel stick procedure.

Blood culture collecting practices in 93 Chinese hospitals compared with international recommendations for pediatric nurses: a national online survey

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ABSTRACT

Background: Sepsis is one of the most common reasons for children's death. Blood culture results are important for diagnosing and treating sepsis. Blood culture collecting practices are related to detection and contamination rates.

Method/Content: An online survey was used to investigate whether blood culture collection practices in Chinese hospitals are based on international practice recommendations. For this purpose, Chinese pediatric nurses who did blood cultures within the past 3 months were asked to complete an online questionnaire about the procedures. These results were then compared with international recommendations. Data were analyzed using descriptive statistics.

Results/Outcomes/Findings: With responses from 2310 participants from 93 hospitals, the questionnaires showed agreement with parts of the procedures, such as disinfecting blood culture bottle stoppers, the sequence in blood culture collection, and not using a venous indwelling needle for blood culture collection. Deviations were particularly evident in blood volume required for blood culture collection, which was different from hospital to hospital, and deviations in not putting culture bottles in the refrigerator (46.28% agreement), wearing gloves when collecting blood (35.24% agreement), not changing the needle before infusion to the bottle (30.74% agreement), and not discarding the catheter fluid when collecting specimens from peripherally inserted central catheter (PICC) line (11.51%).

Conclusions/Discussion: We found large deviations between the blood culture practices and the international guidelines. Improvements in blood culture collecting practices across the country are necessary.

The integrated breast massage versus breast massage in lactation for lactational blocked milk duct treatment: a single center, stratified randomized controlled trail

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ABSTRACT

Background: Lactational blocked milk duct was a common breastfeeding associated problem. Breast massage in lactation (BML) has been performed in many lactation clinics in Thailand. A new massage technique, the integrated breast massage (IBM) was developed. To compare the resolution time, a reduction in mass sizes and pain scores after breast massage in lactational blocked milk duct between being treated with IBM or BML.

Method/Content: A randomized controlled trial was conducted in the Lactation Clinic, Department of Pediatrics, Faculty of Medicine Siriraj Hospital, Bangkok, Thailand from February 2019 to July 2020. Women presented with acute lactational blocked milk duct were enrolled and were allocated into IBM or BML (control) group, using block randomization. One outcome assessor was blinded to group assignment. Mass size in square centimeter (cm2) was a multiplication of perpendicular axes of the mass. Pain score was self-scored by participants using a Numeric Rating Scale. Median time (95% confidence interval) of blocked milk duct resolution was derived using Kaplan-Meier survival curves.

Results/Outcomes/Findings: 84 women who had lactational blocked milk duct, 42 were randomized to each group and all participants completed the follow-up. The largest mass size was 30 (20, 48) and 20 (12, 14) cm^2 in IBM and BML group ($p = .05$), respectively. The median blocked duct resolution time (95% CI) was 0 (not available) and 1 (0.47, 1.53) day in IBM and BML group ($p < 0.01$), respectively. The median of pain score reduction was 8 (7, 8) and 6 (4, 7) in IBM and BML group, respectively ($p = .01$). The IBM technique resulted in significantly less resolution time, higher reduction in mass size and pain score, compared to BML, without adverse clinical outcome.

Conclusions/Discussion: This study suggested that pediatric nurse should apply IBM technique in lactation clinics to improve quality of life of women who had lactational blocked milk duct.

Incidence and risk factors of retinopathy of prematurity, a 10-year experience of a single-center, referral, hospital

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ABSTRACT

Background: Retinopathy of prematurity (ROP) is the most common cause of avoidable severe visual impairment or blindness. Therefore, understanding the local incidence rate of ROP is important in order to guide strategic planning to minimize or eliminate the disease.

Objective: 1) To explore the incidence and trend of ROP over the past 10 years. 2) To identify any association between clinical variables and threshold ROP.

Method/Content: A cross-sectional, retrospective study of infants with <33 weeks' gestational age (GA) or birth weight (BW) ≤1,500g were screened for ROP between January 2010 and December 2019 Infants who had threshold ROP, labelled as the T- group, were compared against the NT-group.

Results/Outcomes/Findings: 1) 1,247 infants who were screened for ROP, 174 tested positive for ROP while 26 had threshold ROP. Infants who had ROP had a mean ± standard deviation (SD) GA 27.2 ± 2.2 weeks and 115 (66.1%) were <1000g at birth. 2) Advanced GA was independently associated with lower risk of threshold ROP [adjusted odds ratio (95% confidence interval, CI); 0.71 (0.52, 0.98), p=0.04]. There was no difference in respiratory and hemodynamic outcomes between the T and NT-group, except for longer hospitalization (median [P25, P75]; 121[106.3, 160.5] and 93.5[72.3, 129] days, p=0.003]. Culture-positive septicemia was independently associated with threshold ROP [adjusted odds ratio (95% CI); 4.48 (1.72, 11.68), p=0.002].

Conclusions/Discussion: The incidence of different stages of ROP in infants was 14% and 2.1% for severe ROP which required treatment. Lower GA and positive-culture septicemia was associated with a higher incidence of severe ROP. Based on this study, pediatric nurse should concern about lower GA and septicemia to reduce the incidence of severe ROP.

Effects of implementing the Newborn Modified Early Warning Scoring (NEWS) in neonatal care, the Queen Sirikit National Institute of Child Health

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ABSTRACT

Background: A transition from inside the womb to outside environment of all newborns is at risk for life-threatening complications. Professional nurses play an important role in assessing early warning signs and providing care to prevent them from harmful complications.

Method/Content: This research and development (R&D) was conducted between October 1, 2020 and May 31, 2021 by applying the System Theory and The Deming Cycle (PDCA).

The subjects included 31 professional nurses and 220 neonatal patients. The research tools included NEWS assessment program, lesson plans, NEWS knowledge assessment, NEWS practice checklist, and nurses' satisfaction on using the NEWS program questionnaire. Data were analyzed by using percentage, mean, standard deviation, pair t-test, and Fisher's Exact test statistics.

Results/Outcomes/Findings: The results revealed that (1) the nurses' knowledge of the NEWS assessment after using the program was significantly higher than before using the program ($p<.001$), (2) the nurses' practice on the NEWS assessment was correct, passing with the average of 96.77 percent ($\bar{X} = 96.77$, S.D.= 7.47), (3) The overall satisfaction on utilizing NEWS assessment of the professional nurses was at the most satisfied, (4) After implementing the NEWS assessment program, the incidence of unplanned moving patients into the ICU decreased statistically significant ($p<.005$), and no incidence of requiring unplanned resuscitation (CPR) of the patient was found.

Conclusions/Discussion: The NEWS program is effective for monitoring newborn patients' complications and help provide suitable care according to their conditions.

Effectiveness of narrative exposure therapy in children and young adults with posttraumatic stress disorder: a Meta-analysis

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ABSTRACT

Background: Post traumatic stress disorder (PTSD) refers to a mental disorder that occurs late and lasts for a long time due to individuals witnessing or experiencing extraordinary threatening or catastrophic traumatic events. It mainly shows invasion symptoms, avoidance symptoms, negative changes in cognition and mood. A survey in China shows that the lifetime incidence rate of PTSD is 0.3%, especially in trauma exposed population, and more than half of PTSD patients have persistent symptoms. Exposure therapy is internationally recognized as the main method for the treatment of PTSD. By repeatedly exposing individuals to an environment that ensures safety and can trigger individual traumatic memory, they can constantly become accustomed, so as to reduce the fear and pain caused by individual traumatic memory. In recent years, narrative therapy is a post-modern psychotherapy that has been widely concerned. Through story narration, it continuously enhances the autonomy and internal motivation of patients. Therefore, more and more scholars take narrative therapy as a supplement to exposure therapy to form Narrative Exposure Therapy (NET). NET has been proved to have good effects in adult population. Children and young people are PTSD high incidence groups. Especially after severe trauma, the incidence rate is about 50%. Therefore, more and more scholars have applied NET to children and young patients. This paper will systematically summarize the RCT research of NET in children and young patients with PTSD, explore its application effect, and provide reference for clinical application in the future.

Method/Content: The Cochrane Library, PubMed, Web of Science, CINAHL, CNKI, SinoMed, VIP and Wanfang database were searched from inception to December 2021. The method of combining subject words with free words is used to search. The quality of the literature was evaluated by the Cochrane Collaboration's tool for bias risk assessment of randomized controlled trials (2011), and Meta-analysis was performed on the included randomized controlled trials.

Results/Outcomes/Findings: Meta-analysis results showed that there was no significant difference between narrative exposure therapy and relaxation therapy in terms of PTSD symptom (post-intervention MD=1.8, 95% CI=-2.96-6.56, Z=0.74, p=0.46>0.05; 6 months post-intervention MD= 1.67, 95% CI=-2.87 to 6.22, Z=0.72, P=0.47 > 0.05), and narrative exposure therapy was more effective than treatment as usual (post-intervention MD=-9.97, 95% CI=-18.17 to -1.78, Z=2.39, P=0.02 < 0.05; 6 months post-intervention MD=-17.27, 95% CI=-30.18 to -4.37, Z=2.62, P=0.009 0.05); a total of 3 literatures comparing depression, narrative exposure therapy was not significantly different from treatment as usual (MD=-3.35, 95% CI=-7.32 to 0.63, Z=1.65, P=0.10>0.05); a total of 2 papers comparing mental distress, narrative exposure therapy was not significantly different from treatment as usual (MD=-3.35, 95% CI=-7.32-0.63, Z=1.65, P=0.10>0.05).

Conclusions/Discussion: According to the Meta-analysis, narrative exposure therapy was more effective than treatment as usual for PTSD symptoms of children and young adult with long-term effects, but had no significant advantage in the treatment of depression and mental distress.

The implementation status and influencing factors of developing supporting care among NICU nurses in China

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ABSTRACT

Objective: The main aim of the article is to investigate the implementation status and explore the influencing factors of Developmental Supportive Care (DSC) behavior among registered nurses working in neonatal intensive care unit (NICU)in China.

Method: A convenience sample of 1702 NICU nurses from 117 hospitals in 26 provinces around China were recruited into this cross-sectional study. The Chinese version of Developmental Supportive Care Behavior self-review checklists were applied to collect the data. Multiple linear stepwise regression was performed to detect the possible factors (independent variable).

Results: The average score of DSC behavior among NICU nurses was (202.82±30.345). Observing the suggestive behavior of premature infants had the lowest score. Geographical division, nurse-patient ratio, employment type, job title, attitude and whether certificated in NICU were the important influencing factors and significant predictors. The stepwise regression analysis results showed that job title and whether the nurses, hospital, and coworkers supported to deploy DSC were significantly correlated.

Conclusions: The findings indicated that the overall status of DSC behavior among NICU nurses in China is not optimistic. To improve the clinical implementation of DSC, nursing managers should strengthen the attention and enhance the systematic training for nurses, especially in the observation of suggestive behavior of preterm infants. There is an urgent to issue DSC implementation guidelines and relevant evidence-based evidence, and establish a continuous follow-up monitoring team to provide long-term personalized and high-quality development support for preterm infants.

Keywords: Development supporting care; Preterm, infant; Neonatal Intensive Care Units; Nurses.

Psychological health of primary caregiver: an association of primary caregiver's stress /depression with behaviour severity of Autistic children

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ABSTRACT

Background: Autism Spectrum Disorder (ASD) is a neuro-developmental disorder. Nurturing such a child puts a massive burden on primary caregiverdue to unknown etiology of ASD that gives stress which is a leading cause of depression.

Objective: To evaluate stress and depression; their association with disease severity by using Parenting Stress Scale (PSS) and Beck Depression Inventory (BDI) for stress and depression, respectively. Childhood Autism Rating Scale (CARS) was used to check the severity of a child's autistic disorder.

Method: A descriptive cross-sectional study was conducted and study population of 96 primary caregivers was taken according to inclusion and exclusion criteria.
Results: The study findings revealed mean stress score of 52.3±7.3 with the range of 36.0 to 70.0. Depression score was 62.5%; where 25.0%mildly, 11.5% borderline/clinical, 16.7% moderately, and 9.4% were severely depressed. Correlation between stress and depression of primary caregivers and autism severity were positive but statistically insignificant (0.172, 0.317).

Conclusion: The findings of current study revealed that prevalence of depression was found higher than stress in primary caregivers and these levels increased with greater severity of disorder. Stress is a key factor of developing depression and affects both the autistic child and primary caregiver equally. The psychological well-being of primary caregivers should be considered as an important factor along with the intervention programs for children of ASD.

Keywords: Stress; Depression; Autism Spectrum Disorder; Primary Caregivers; Relationship.

First Nations children and homelessness: Insights from a Nurse Practitioner-led primary health care service

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ABSTRACT

Background: This paper documents the impact of a Nurse Practitioner-led primary health service for disadvantaged children living in housing instability or homelessness. It identifies that First Nations children miss out on essential primary care, particularly immunisation, but have less severe health conditions than non-First Nations children living in housing insecurity.

Health services for homeless populations focuses on the 11% of rough sleepers, little is done for the 22% of children in Australia living in housing instability; many of whom are from First Nations families. Little is known of the health status of these children or their connections to appropriate primary health care.

Method: This research implemented an innovative model of extended health care delivery, embedding a Nurse Practitioner in a homeless service to work with families providing health assessments and referrals, using clinically validated assessment tools. This article reports on proof of concept findings on the service that measured immunisation rates, developmental, medical, dental and mental health needs of children, particularly First Nations children, using a three-point severity level scale with Level 3 being the most severe and in need of immediate referral to a specialist medical service.

Findings: 43 children were referred by the service to the Nurse Practitioner over a six-month period, with nine identifying as First Nations children. Differences in severity levels between First Nations/non-First Nations children were level 1, First Nations/non-First Nations 0/15%; Level 2, 10/17%, and Level 3, 45/29%. 45% of First Nations children had no health problems, as compared to 29% on non-First Nations children. Immunisation rates were low for both cohorts. No First Nations child was immunised and only 9% of the non-First Nations children.

Conclusions: While numbers for both cohorts are too low for valid statistical analysis the lower levels of severity for First Nations children suggests stronger extended family support and the positive impact of cultural norms of reciprocity.

The effect of educational program using Cartoon Animation Video for caregivers of children with epilepsy

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ABSTRACT

Background: Epilepsy is a common neuropathy and a major public health problem in Thailand. In children with epilepsy, it is necessary to receive proper care. The proper care can prevent and control seizures. Therefore, pediatric nurses need to be promoted accurate knowledge and understanding of epilepsy and the methods of care that will enable caregivers to properly care for children with epilepsy according to a treatment plan.

Objective: To examine the effect of educational Program using Cartoon Animation Video for caregivers of Children with Epilepsy on epilepsy knowledge of caregivers among children with epilepsy.

Method/Content: The research is a quasi-experimental research. The One Group Pre- Posttest. Design by dividing the measurement of knowledge into all 3 times, before watching the video. After the 1st and 2nd round watching the video. (4 weeks upon appointment). The samples were caregivers of 36 children with newly diagnosed with epilepsy who were received anticonvulsants, aged 1-12 years. The statistics used for data analysis were One-Way repeated measure ANOVA.

Results/Outcomes/Findings: After the experiment, scores of epilepsy knowledge in caregivers significantly higher scores than those before the experiment at 0.000. After 2nd round watching the video in caregivers significantly higher scores than after 1st round at 0.000. These finding showed that the educational Program using Cartoon Animation Video can enhance knowledge.

Conclusions/Discussion: Education program using video, animation, video It is a tool to help caregivers of children with epilepsy. Therefore, nurses should use the educational Program using Cartoon Animation Video to promote knowledge of caregivers, leading to appropriate care of children with epilepsy.

Section 2: Primary Health Care and Community Child Health

Construction and evaluation of Nomogram model to predict emotional behavior and internalization problems in school-age children

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ABSTRACT

Background: Children and adolescents are at a developmental stage during which they are exposed to a number of factors that lead to the emergence of physical and psychological problems and can be precursors to mental and social disorders throughout life. Studies have shown that psychological problems affect up to 20% of children as a public health problem, and that childhood mental disorders can affect learning and social functioning. These symptoms are not properly diagnosed or treated, may persist for many years, and are associated with adulthood such as unemployment, drug abuse and crime. This study is to establish a Nomogram model to predict emotional behavior and internalization problems in school-age children, and provide a reference for early identification of high-risk school-age children and relevant preventive measures.

Method/Content: Cluster sampling method was used to investigate school-age children with general data questionnaire, child peer relationship Scale and child loneliness scale. Logistic regression analysis was conducted on the independent risk factors of emotional behavior problems, and the line graph prediction model was established and verified.

Results/Outcomes/Findings: Among 621 school-age children, 86 (13.8%) were diagnosed as emotional behavior and internalization problems. The educational level of parents, family income, marital type of parents, loneliness scale score and peer relationship scale were the influencing factors for emotional behavior and internalization problems of school-age children. Based on the above factors, a line graph model was established, and the verified C-index was 0.815.

Conclusions/Discussion: This Nomogram model can help screen the risk of early emotional behavior and internalization problems in school-age children and effectively predict the occurrence of postpartum depression.

Identification of risk factors of hearing loss in twins babies with different conception methods: a prospective cohort study based on hospitals from 2017 to 2020

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ABSTRACT

Background: Long-term complications in in vitro fertilization and embryo transfer (IVF-ET)-conceived infants have always been one of the main focus in research. And research has already revealed higher incidence of birth defects in the urinary system, digestive system, and circulatory system of the offspring conceived by IVF-ET than that of the naturally conceived offspring. However, whether there is an increased risk of hearing loss in IVF-ET infants remains unknown, and only few studies were focused on this topic. We intend to compare the incidence of hearing impairment in IVF-ET twins and natural twins through a prospective cohort study to explore the potential factors of hearing impairment in twins.

Method/Content: Hearing test results, Neonatal birth situations and perinatal complications, Maternal general situations and complications of pregnancy of 1,860 twin newborns were collected at our hospital from January 1st, 2017 to December 31st, 2020. Samples were divided into IVF-ET group (n = 950) and natural pregnancy group (n = 910), The incidence of hearing impairment was compared between two groups, and then unconditional logistic regression analysis was used to find potential factors.

Results/Outcomes/Findings: Objective audiology test at the age of 6 months showed 21 cases in the IVF group abnormal and 9 cases in the control group, the incidence of hearing impairment were 22.11 ‰ (21/ 950) and 9.89 ‰ (9/ 910) (P =0.037, P< 0.05). There was a significant statistical difference in the incidence of hearing impairment between two groups at 6 months of age (P<0.05), the unconditional logistic regression analysis showed gestational age and method of conception were definite influencing factors.

Conclusions/Discussion: The incidence of hearing impairment in twins conceived by IVF-ET was significantly higher than that in naturally conceived twins. Premature delivery and IVF-ET conception were the major factors for their high incidence of hearing impairment.

Expanding community care for marginalised children: a model of research embedded care delivery

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ABSTRACT

Background: One in five children in Australia between the ages of 0-5 years experiences homelessness. The global housing crisis can create lifelong health impacts. Accessible health services addressing the needs of children living in housing instability are essential. Community Nursing potentially provides a health response.

Method/Content: This study investigated the enablers and barriers to the usual health access using mixed-methods, health assessment tools, extended referral uptake measures, parent surveys, and parent and staff interviews to capture the impact on children's health of family homelessness.

Objective:
1. Identify the health needs of marginalized children and refer them to appropriate services including health, educational and welfare; and support child/family compliance; follow up referrals and treatment plans; and encourage regular health checks.
2. To test the Nurse Practitioner (NP) 'Health Hub' model of care using a combination of the NPs advanced practice knowledge, and a detailed health assessment using standardized tools to identify the child's immediate, and ongoing health and referrals needs.
3. Determine the effectiveness of the Nurse Practitioner-led service and identify opportunities to improve and roll-out the model across Australia.

Results/Outcomes/Findings: Our findings overall showed that 62% of the children had severe health conditions (e.g. craniosynostosis with developmental delay) requiring interventions, while 38% of children were in good health requiring no intervention.
- All children were disconnected from mainstream health services;
- Families indicated decreased use of Emergency Departments;
- The community service is more cost effective compared to ED presentations.

Conclusions/Discussion: The NP provided comprehensive child health assessment using standardised tools, partnerships with families for referral, and access plans encompassing the health, social and educational needs of the child. The barriers included; lack of transport, access to primary health care, no access to paediatric specialist care or allied health care. The NP service directly addressed all these issues for the children improving health outcomes.

Perceptions and attitudes toward children with attention deficit hyperactivity disorder of parents: a Q-methodological study

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ABSTRACT

Background: Attention Deficit Hyperactivity disorder (ADHD) is a common chronic neurodevelopmental disorder that starts in childhood and can continue into adulthood. ADHD not only impairs learning function, but also has other impairments involving the whole life cycle. The global incidence of children is about 7.2%, and the prevalence of ADHD in children and adolescents in China is 4.2%-6.5%, presenting a chronic course of disease, and 60%-80% can last to adolescents. Current studies have found that the main reasons for the lack of timely intervention of children with attention deficit hyperactivity disorder are related to the adaptive behavior of children with attention deficit hyperactivity disorder, the mastery of basic knowledge, parents ' cooperation and family education. Therefore, it is important to understand the attitudes of children's parents. This study is to explore parents' cognition and attitude towards children with attention deficit hyperactivity disorder, and to provide reference for children with attention deficit hyperactivity disorder and their parents to implement intervention.

Method/Content: The Q method was used to explore the parents' cognition and attitude towards ADHD by establishing Q samples, selecting P samples, ordering Q, and analyzing Q, and then classifying and ranking them.

Results/Outcomes/Findings: The parents of 18 children participated in the study. According to the parents' cognition and attitude towards attention deficit hyperactivity disorder, the children were divided into four types, namely, knowledge needs, care needs, disease management needs and attention needs. The parents of different types of children had differences in knowledge mastery, different stage needs and personality, etc.

Conclusions/Discussion: Parents of children with ADHD have different cognition and attitude, and medical care should develop personalized intervention measures according to different preferences, so as to improve family members' cognition of the disease, so that children with ADHD can get correct attention.

Section 3: COVID-19 and Disaster Nursing in Paediatrics

Impact of the COVID-19 pandemic on implementation of family-management models of children with asthma from their parents' perspective: a phenomenological qualitative study

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ABSTRACT

Background: Recurrent pandemics of COVID-19 pose a new challenge for unprepared caregivers of children with asthma. In China, children with asthma are defined as "highly vulnerable" group. The asthma family-management model (AFMM) for children with asthma is an important key to symptom control, and caregivers play an important role in the family-management model for school-age children with asthma.

Objective: This study aims to understand the impacts of implementing a AFMM during a pandemic from parents' perspective.

Method: This study took place in the paediatric respiratory wards of China, participants first fill out a form with information about the child's asthma and then received a semi-structured in-depth interview that took an average of 40 minutes. Researchers use Colaizzi phenomenological method to analyze the textual data collected from the participants. Text data were independently coded and categorized before being merged into major themes and subthemes.

Results: Twenty-four parents were included, three major themes and eight subthemes emerged reflecting the three different levels of influence on the family asthma management model during the COVID-19 pandemic: (1) Internal factors: family relationship, health-related belief, coping strategies; (2) External factors: public awareness, e-health consultation, strict isolation; (3) Social factors: social support, preventive measures.

Conclusions: The finding of current study gives insight into improving the practice outcomes of a AFMM for asthmatic children at this particular time. It demonstrates the need to build an integrated model of care around three levels of influence to address the impact of COVID-19.

Covid-19 infection and risk assessment of healthcare workers at tertiary care hospital: a retrospective study conducted at Karachi Pakistan

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ABSTRACT

Background: A mysterious infectious illness has been epidemic in Wuhan, China, which showed an alarming spread since their first public reporting on 31st, December 2019. and placing Health care workers (HCWs) at high risk of exposure. Preventing HCW infections is important for reducing morbidity and potential mortality among frontline staff, maintaining health system capacity, and reducing secondary transmission, Infection prevention and control suggest a major cause of transmission in health care professional are due to poor compliances of hand hygiene, wearing personal protective equipment incorrectly. It's known that those employed in health care facility are face greater exposure that cause infection transmission such as COVIS 19.

Method/Content: The study design was retrospective cohort, data was collected from April to July 2020, 2192 staff working in 300 bedded hospital were included in study and considered as high exposure risk. All were examined for risk assessment and tested for covid Polymerase Chain Reaction (PCR). A structured self-assessment questionnaire was used to collect the data. Data was analysis on SSPSS V-26.

Results/Outcomes/Findings: A total 2192/ 2501 participant was analyzed. 1243 HCWs tested PCR through nasopharyngeal swabs, including 518 (45%) tested due to symptoms and 643 (55%) were asymptomatic. Out of these participants1451 (66%) were males and 741 (34%) were females and the mean age of the participant was 32.10 ± 7.62.PCR results of 432/1243 (35%) HCWs were positive, including 255 (59%) with and 177 (41%) without symptoms. High risk exposure were 136 (31.5%) moderate risk 277 (64.1%), and 16 (13.4%) were low risk (risk categorization derived from CDC) exposures to COVID-19. Positive HCW were exposed to their colleagues, 38%, and 13.4% exposed to patients and 5.1% exposed to families. The mortality of positive HCWs was 0.23%.

Conclusions/Discussion: In conclusion we observed that the number of cases among HCWs during COVID pandemic was increases day by day. To help in reducing number of positive HCWs it should improve and ensure the PPE compliance, hand hygiene and marinating distancing with colleagues and families. High and moderate risk exposed staff were found close contact with others staff during meal or tea break time. Implement effective policies and SOP to reduces exposure risk is very necessary in hospital sitting, higher management of organization must vigilant to follow polices and SOPs.

These above findings could be helpful to monitor the practices of HCWs as well as help to reduces risk for acquisition of COVID-19 by healthcare personnel.

Section 4: Nursing Education and Research in Paediatrics

Core competencies of pediatric rehabilitation specialist nurses in China: a qualitative study

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ABSTRACT

Background: After 40 years' development, Chinese pediatric rehabilitation medicine has made great progress, and rehabilitation personnel training system has gradually improved. As an integral part of the rehabilitation group, nurses become more and more important. However, because of the late start of pediatric rehabilitation nursing, it is still not clear about the roles and ability requirements for pediatric rehabilitation specialist nurses. This study aims to explore the roles and core competencies of pediatric rehabilitation specialist nurses in China.

Method/Content: Based on the Hamric's Model of Advanced Practice Nursing, this study developed an interview outline, and conducted semi-structured interviews with eight pediatric rehabilitation nurses, two nursing leaders, three pediatric rehabilitation physicians and two rehabilitation therapists. The interview data were analyzed by Colaizzi analysis.

Results/Outcomes/Findings: At present, pediatric rehabilitation specialist nurses in China act four roles: the leader of the specialized nursing group, professional caregiver, health manager and communication coordinator. To act these four roles well, specialist nurses are required to possess seven core competencies, including direct clinical nursing competencies, education and advisory competencies, management competencies, communication and collaboration competencies, critical thinking competencies, research competencies, and personal traits. The rehabilitation group members all believe that specialist nurses are supposed to improve the education and advisory ability about Rehabilitation guidance. Additionally, the nursing managers and the specialist nurses pay attention to the improvement of critical thinking ability, while the physicians and therapists focus more on specialist nurses' communication ability.

Conclusions/Discussion: The paper extracts the roles and core competencies of pediatric rehabilitation specialist nurses from the perspective of pediatric rehabilitation team members, which provides the reference and basis for training and evaluating pediatric rehabilitation specialist nurses.

Effect of sick child role simulation in cultural communication training of junior nurse in paediatrics

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ABSTRACT

Background: The purpose of this study is to explore the effect of child role simulation in improving the humanistic communication training of pediatric junior nurses, in order to provide a scientific basis for the wider application of this new teaching mode in pediatric nursing training.

Method/Content: Fifty-nine junior nurses in the department of pediatrics of our hospital with working time ≤3 years as of July 2021 were selected as the research objects, and were divided into control group and observation group by lottery. Control group 29 nurses received traditional theoretical humanities and communication training. 30 nurses in the observation group were given role simulation training for 8 times for 2 months in addition to the control group. Before and after the training, humanistic care ability scale, clinical nurse communication ability scale and professional benefit questionnaire were conducted.

Results/Outcomes/Findings: After role simulation training, the average score of the observation group was (217.68±16.92), which was significantly higher than that of the control group (203.96±13.63) ($P < 0.001$). The average total score of communication ability in observation group was (242.64±43.61), significantly higher than that in control group (206.75±41.28) ($P < 0.001$). The total benefit score of the observation group (142.32±28.56) was significantly higher than that of the control group (132.24±24.84) ($P < 0.05$).

Conclusions/Discussion: Role simulation training can not only effectively improve nurses' humanistic care ability and clinical communication ability, but also promote them to gain a higher sense of professional benefit in clinical nursing work, which is worth promoting in pediatric humanistic training.

Section 5: Quality and Safety in Paediatrics

Establishment of Nomogram model for prediction of intraoperatively acquired pressure injuries in children undergoing brain tumor surgery

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ABSTRACT

Background: Pressure injury is local damage to the skin and/or underlying tissue caused by stress with or without shear, usually at bone protrusion or associated with the use of medical equipment. Intraoperatively Acquired Pressure Injuries (IAPIs) occurs from several hours later to 6 days later. The study found that surgical patients are at high risk of pressure injury, with an incidence of 2.5 to 66%. Currently, there have been many studies on the etiology, formation mechanism, morbidity, and treatment of pressure injury in adults, while relatively few has been reported on pressure injury in children. The care of childhood pressure injury is a highly challenging problem because children's skin has characteristics of thinner skin, smaller cells, and lack of connection between epidermis and dermis, so great caution is needed to infer childhood pressure injury from research data on adult pressure injury. Due to complicated pediatric brain tumor resection, long surgery time, excessive intraoperative bleeding, and continuous special surgical position during surgery, the incidence of IAPIs is higher than other surgeries. However, there are still few research reports on IAPIs in pediatric brain tumor resection surgery at home and abroad. Through retrospective analysis, this study explored the characteristics and related risk factors of IAPIs in pediatric brain tumor resection, and constructed and validated the individualized predictive risk model, which provides a certain reference for accurately identifying high-risk children and formulating corresponding prevention strategies.

Objective: To analyze the risk factors of intraoperatively acquired pressure injuries (IAPIs) in children undergoing brain tumor surgery and establish a nomogram model for preventing their occurrence.

Method: A retrospective study was used to analyze clinic parameters of a total of 146 children who underwent brain tumor surgery in Children's Hospital of Chongqing Medical University from March 2020 to May 2021. First of all, risk factors of the children's IAPIs was investigated by univariate analysis. Secondly, Multivariate logistic regression analysis was conducted to identify independent risk factors of the children's IAPIs. Nomogram model of the children's IAPIs was established by R soft. H-L deviation test and ROC curve were respectively used to validate the deviation and discrimination of Nomogram model.

Results: The incidence of IAPIs in this study was 10.3% (15 of 146 children). Multivariate logistic regression analysis revealed that age [OR=0.047 ,95%CI (0.004~0.623)], amount of bleeding [OR=5.813, 95%CI (0.811~41.662)], vasopressor [OR=9.418 ,95%CI (1.112~79.742)], length of surgery [OR=2.438, 95%CI (1.293~4.599)] were independent risk factors of the children's IAPIs (P<0.05). Accuracy and discrimination of Nomogram model were verified by H-L test (X2=0.332, P=0.685) and ROC curve [AUC=0.965, 95%CI (0.931~0.979)].

Conclusions: By this study to analyze relevant risk factors, the Nomogram model illustrate significantly predictive ability, that can provide scientific and individual guidance for preventing the children's IAPIs.

Keywords: Brain Tumor; Pressure Injury; Nursing Care; Operation; Nomogram.

Application of high-reliability organization theory in near-error events in pediatric nursing: a prospective clinical controlled study

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ABSTRACT

Background: Near-miss adverse event occur approximately thirty to three hundred times more frequently than adverse events, making early warning of system vulnerabilities. The Chinese Hospital Association included near-miss error management in its top ten patient safety goals in 2019. Global Action Plan for Patient Safety (2021-2030) in WHO included building a highly reliable and organized health system in the seven strategic objectives of the action plan. High-Reliability Organizations (HROs) view accident occurrence and safety management through the lens of the organization. It is an effective management and early warning system for safety.

Method/Content: Develop a scheme for managing near-miss events based on the theory of HROs, including event reporting (encourage reporting, review of risk factors, event optimization); investigation and analysis (using the STICC report, determine the quickest and most optimal corrective measures, resource flexibility); risk warning management (multiple transmission, continuous learning, inferences); and implementation and correction management (leadership commitment, operational sensitivity, respect for expert opinion) (assess rectification scope, extent and duration of effect). The experimental group applied HROs in near-miss events in pediatric nursing management, including trial operation (Nov-Dec 2018) and formal operation (Jan-Dec 2019), as described above. The control group (Jan 2018 – Dec 2018) received traditional adverse event management methods, including event reporting, systematic review, and clinical follow-up and feedback.

Results/Outcomes/Findings: Following implementation of this program, the incidence of adverse clinical care events decreased (X^2=9.23, $P < 0.01$), the correct rate and active reporting rate of close-error event reporting and disposal procedures increased (X^2=16.58, $P < 0.01$; X^2=11.21, $P < 0.01$) and Patient satisfaction was statistically significant (X^2=188.27, $P < 0.01$). The results of action research in qualitative research showed that hospital managers and nurses had a high acceptance of the management mode, but the effect of continuous management needs to be tracked.

Conclusions/Discussion: Using a HROs for near-miss events in pediatric nursing can significantly improve risk management in pediatric clinical nursing, and establishing a mindfulness culture can increase organizational reliability, increase the efficiency of managing near-miss adverse events, and promote patient safety.

Effect of whole process management of mother's milk with HACCP on extreme/super premature infants

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ABSTRACT

Background: This project introduces HACCP (hazard analysis and critical control point) into the quality improvement of maternal breast milk management in order to build a more authoritative whole process system of maternal breast milk safety and quality management.

Method/Content: A total of 245 extremely/ultra-premature infants were selected as the pre-QI group. apply the HACCP theory, establish four key control points and conduct clinical inspections to find out the specific quality improvement of the breast milk bank. The improved process was applied to 156 extremely/ultra-preterm infants (Post-QI group). Statistical analysis such as QCC effect confirmation and analysis of variance, rank sum test, X^2 test and Bonferroni test was used to form a standardized standard for mother's breast milk management.

Results/Outcomes/Findings: 1. The implementation rate of the improved HACCP specification is 79.82%, which is 41.9% higher than the before (56.25%), and the target achievement rate is 100.55%. The whole process standard book of maternal breast milk quality management in the breast milk bank is formed. 2. Compared with the pre-QI group and the post-QI had significantly increased breastfeeding rates of MOM [0-7d:38.2%vs72.8%;0-14d: 37.8%vs 91.9%; 0-28d: 58.2% vs 96.6%; during hospitalization: 50.0%vs 96.6%; all P<0.05] and volume of MOM intake [0-7d: 31vs82ml; 0-14d: 198vs622 ml; 0-28 d: 1458 vs 2707ml. The time on first MOM breastfeeding in the post-QI groups were earlier than that in the pre-QI group [69 vs73h, P<0.05]. Compared with the pre-QI group, Incidence of feeding intolerance, BPD and LOS in the post-QI group decreased by 34.2%and 47.5%; 20.1% and 36.1%;35.0% and 47.5% (all P<0.05), respectively.

Conclusions/Discussion: A scientific closed-loop management system of breast milk bank based on HACCP is established to provide a solution for the balance of maternal breast milk safety and function for premature infants.

The effect of knowledge management program of nurses for practice on pediatric patient with central venous catheters care guidelines at pediatric's surgical ward

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ABSTRACT

Background: Bloodstream infection was influenced by many factors, one of which found that clinical personnel did not follow central venous catheters care Guidelines If practice and evidence-based care is established in pediatric patients with central venous catheter insertion can reduce the incidence of CLABSI. Knowledge management is a process carried out jointly by the operators in the organization. To create and use knowledge to work to achieve better results than before. Therefore, the researcher has applied the concept of knowledge management as a tool to help nurses gain access to knowledge and develop themselves and including working efficiently by following the guidelines that nurses in the unit have participated in the preparation.

Method/Content: To study and compare means the effect of knowledge management program of nurses for practice on pediatric patient with central venous catheters care guidelines.

This is a quasi-experimental research. Sample was 11 nurses of pediatric's surgical ward. Instruments used in this study is 1. Knowledge management program on Dr. Wichan Phanit's conceptual flamework. 2. Guidelines for the care of patients with central venous catheters 3. Another instrument used to gather data are observational follow-up guidelines. 11 nurses were collected as experimental group before and after using the knowledge management program.

Results/Outcomes/Findings:
1. Means of practice on pediatric patient with central venous catheters care guidelines after using the knowledge management program was very good level.
2. Comparison of practice on pediatric patient with central venous catheters care guidelines after the use of knowledge management program was higher than before using at level .05 with statistical significance except for step change intravenous sets and the blood components sets do not differ.

Conclusions/Discussion: The knowledge management program helps nurses to follow the guidelines better.

Parental experience of transition from Pediatric Intensive Care Unit to a general ward: a qualitative study

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ABSTRACT

Background: Care for a critically ill child who has been discharged from the PICU can be stressful and complex, but it is an unavoidable obligation that parents are called to fulfill. A limited number of qualitative studies have been carried out in Chinese populations with regards to the parents' perception of the transition.

Objectives: The aim of this study was to explore the experience of parents taking care of PICU survivors in China.

Method: This is a qualitative descriptive study, semi-structured interviews were utilized to explore views of purposive sample of 26 children's parents who have been taking care of critically ill child in children specialized hospital in shanghai, mainland China. Transcripts were entered into NVivo. Qualitative thematic analysis was used to analyze the data for significant statements and phrases that in turn were organized into themes and sub-themes.

Results: Based on data analysis, four themes were identified: changes of child in both pre-and-post ICU periods, going through a Hurricane of Emotions, factors involved in the transition, demand for the transition. This research emphasizes the need for healthcare teams to be aware of what parents' experience during transfer, in order to identify expectations and concerns related to caring for a hospitalized child.

Conclusions: To assist parents through this challenging time and improve the safety of PICU survivors, parents expressed a great desire to receive continuous support, such as information, psychological and emotional counseling, and more collaboration between healthcare professionals and parents before, during, and after the transition from the PICU to the general ward in China.

Section 6: Nurse Informatics and Innovation in Health

The present of humanistic care of "portable infusion bag" in transfusion room at pediatric

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ABSTRACT

Objective: Because of baby without capacity, he must be accompanied by parents with holding mostly while transfusion. However, as parents act, it's very inconvenient that it needs other to move infusion holder or lift infusion bag up. The portable infusion bag is to improve nursing service, strengthen humanistic care, solve parents practical difficulties, avoid infusion leakage and dislodgement, and reduce the pain of repeated puncture.

Method: Modify baby sling commercially available today into a multifunctional bag for infusion. Parents can move freely while transfusion without others' help.

Results: The invention felicitously solves two problems, ensured infusion security and multiple purposes. One problem is that parents should not only hold their children but also lift infusion bag up. The other one is that it's prone to infusion leakage and dislodgement while parents moving with holding children. Conclusions: The present of humanistic care in pediatrics care is not only the combination of nursing skills and humanistic care, but also the effectual way to structure harmony nurse-patient relationship and increase parents satisfaction.

Development and usability of a pediatric medication dosage calculation program based on end user computing

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ABSTRACT

Objective: To develop a pediatric medication dosage calculation program and to test its usability.

Method/Content: The development of pediatric medication dosage calculation program was based on end user computing. A convenient sampling of 200 times in each calculation methods (calculating by this program or calculating by calculator in the traditional way). The time-consuming and accuracy of caculation were evaluated for the efficiency and preliminary effectiveness between two calculaton methods. Furthermore, 10 end users were selected to assessment the acceptance of designed program by the USE questionnaire, which represented its usability.

Results/Outcomes/Findings: The accuracy of calculation by using this program was 100%, which was significantly higher than using the traditional method (accuracy was 88%) (X^2=25.532, P<0.01). Furthermore, the average time-consuming of each calculation by using this program was (15.15±2.74) seconds, which was significantly faster than using the traditional method (time-consuming was (17.09±5.22) seconds) (t=3.451, P=0.001). The average score of the USE questionnaire was (6.22±1.03) points, which demonstrated high acceptance of this program for nurses.

Conclusions/Discussion: The pediatric medication dosage calculation program designed in this study meets the clinical needs of nurses and has a relatively-higher acceptance. This program can effectively avoid calculation errors caused by manual calculation, also save nurses a considerable amount of time spent in calculation and double check.

Poster Presentation

Section 1: Paediatric Nursing Practice

The stress and coping strategies of caregivers of children with dialysis: a meta-synthesis of qualitative studies

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ABSTRACT

Background: Although dialysis can save the lives of children, it not only reduces the quality of life of children, but also causes the caregivers to experience physical and mental stress. However, while caregivers experience stress, they also adopt some positive coping strategies to adapt to the caregiver role. The purpose to systematically evaluate the stress and coping strategies of caregivers of children with dialysis, and provide basis for promoting the physical and mental health of caregivers.

Method/Content: PubMed, EMbase, Web of Science, Cochrane Library, CINAHL, PsycINFO, CNKI, VIP, Wanfang and CBM were searched to collect qualitative studies on the experience of caregivers from inception to September 2021. The quality of studies was evaluated according to JBI Critical Appraisal Tool for qualitative studies in Australia, and the results were integrated by meta-synthesis method.

Results/Outcomes/Findings: A total of 13 articles were included, 48 results were extracted, and 3 synthesized findings were grouped from 8 categories, including caregivers experience physical and mental stress: heavy burden of care, excessive psychological pressure; the stress factors of caregivers come from many aspects: insufficient social support, changes in family life and the impact of disease on children; the caregivers adopt positive coping strategies to adapt to the care role: accept and pray, seek support, maintain positive and personal growth.

Conclusions/Discussion: Health care providers should not only identify and reduce the pressure of caregivers, but also guide them to apply positive coping strategies. The family, hospital and society also need to build a more comprehensive support network to meet the needs of caregivers, so as to promote the physical and mental health of caregivers.

Gene treatment and nursing of children with type II spinal muscle atrophy

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ABSTRACT

Background: Spinal muscular atrophies (SMA) is a rare inherited neuromuscular disease, most of which is caused by the defect of motor neuron survival gene (SMN) located on 5q11.2-q13.31. The clinical manifestations are characterized by motor neuron paralysis. This can lead to severe progressive muscle atrophy, weakness and paralysis, even loss of the ability to exercise, and difficulty performing basic life functions such as breathing and swallowing.

Objectives: To summarize the nursing care of 3 cases of spinal muscular atrophy (SMA) with intrathecal injection of Nusinersen sodium injections.

Method: Applying multidisciplinary care, the key points of nursing care include: multidisciplinary individualized assessments, multidisciplinary care based on case management model, preoperative and intraoperative care cooperation, and postoperative observations and management of complications.
Results: All the three children successfully completed intrathecal injection and were discharged on the second day after surgery. No serious complications occurred.

Conclusion: Multi-disciplinary joint care has a positive intention for SMA children with intrathecal injection of Nusinersen sodium injections.

Implementation of noise reduction program in Neonatal Intensive Care Unit (NICU)

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ABSTRACT

Background: Premature Infants are particularly vulnerable to elevated noise levels due to their immature auditory pathway. Many studies showed that such excessive noise will lead to many adverse health consequences and affect the long-term neurological development. However, the environment of NICU is constantly exposed to ambient noise that often exceeds recommended levels. American Academy of Paediatrics proposed noise levels should not exceed 45 dB in NICU. We have studied the noise level in our NICU was ranged from 52 to 79 dB that exceeded the recommended level. The consequence of the noisy environment further triggers elevated volume of conversations, alarms of monitors, also affecting staff health. Although some loud noise in the NICU is unavoidable, some strategies was implemented to decrease the noise levels in our busy NICU. Therefore, the goal of this CQI program is to effectively reduce noise level in our NICU to promote both patient and staff health.

Method: Firstly, we searched for literature on the evidence of noise sources in NICU. Secondly, we used questionnaires to survey staffs' perception on sources of noise. Thirdly, we arranged different briefings and training sessions to raise staff awareness on the impact of loud noise. Fourthly, we implemented strategies to reduce noise. To monitor the effectiveness, we used standardized noise-meter (Ear Monitor) for continuous monitoring sound level and raised staff's alertly and awareness. Finally, we measured and compared the noise level before and after the program.

Results/Outcomes/Findings: The mean ambient noise level within NICU was reduced by 9 % from baseline measurements in the span of a year. There were also reductions in individual items, ranging from 0.3 db to a maximum of 19.7 db after implementation of different strategies.

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Evidence-based nursing practice of reducing neonatal PICC intubation pain

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ABSTRACT

Background: By applying the best evidence of neonatal PICC intubation pain management, improve neonatal PICC pain management norms, improve the compliance of nurses' pain management behavior, and reduce neonatal pain during PICC intubation.

Method: Using the evidence-based continuous quality improvement model developed by the Evidence-Based Nursing Center of Fudan University, through systematic retrieval and quality evaluation of literature related to neonatal PICC intubation pain, 9 pieces of the best evidence were summarized and combined with clinical application scenarios and professional judgment, formulate 13 review indicators. Use the i-PARIHS Evidence-Based Practice Conceptual Framework to analyze barriers and develop strategies for change.

Results: After review, medical staff's compliance with neonatal PICC pain management improved, and neonatal pain during PICC intubation was significantly reduced ($p < 0.01$).

Conclusions: The evidence-based scheme of neonatal PICC intubation pain management can be used in clinical practice, which can standardize the evidence-based nursing behavior of nurses, improve the compliance of pain management behavior, and reduce the pain during neonatal PICC intubation.

Wound management experience of a school-age child with sepsis complicated by Steven-Johnson syndrome

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ABSTRACT

Background: This paper mainly introduces the process and experience of wound dressing change for a school-age child with sepsis complicated with Stevens-Johnson syndrome. For school-age children in a critical condition, poor compliance, detected scope is widespread, the week of eyelids, lips, ears, genital, the whole body skin around 80%, a large amount of nutrient loss, and the problem of severe pain nursing personnel communication.

Method: Gradually applied to wet the wound healing concept, the use of combination of TCM and growth factor in patients with a series of functional dressings for wound dressing.

Results: Good results were obtained and no adverse reactions occurred.

Conclusions: For children in critical condition, serious infection, Procalcitonin as high as 7.651ng/ml. The nurses in my department are completing systemic anti-inflammatory treatment as instructed. such as The use of linezolid and Imipenem cilastatin sodium Focus on sterility principle and Wet wound theory, Strengthen systemic symptomatic support treatment. The above are effective for the cure of Children.

Family integrated care for premature infants

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ABSTRACT

Background: To establish the pre-discharge ward for premature infants based on family integrated care (FIC) model and evaluate its effects of application.

Method/Content: The premature infants who reached the pre-discharge standard that 5 days before they discharged were admitted to the FIC ward were selected. According to the training curriculum, the specialized nurses of NICU implemented a total of 5-day group teaching and bedside one-to-one parenting knowledge and skills training for 28 groups of families. The contents include "home care skills, feeding and nutrition, early intervention, observation of symptoms and signs, first aid knowledge, safety precautions, special care and parent-child relationship". Every morning from 10:30 to 11:30 is the group teaching time. Before that, the baby has been bathed and the treatment on that day have been completed, it is a time period that parents are not easy to be disturbed by their children. The contents focusing on theoretical teaching and first aid skill training. During group teaching, premature infants are sent to NICU for care, and parents are trained in a room equipped with tables and chairs, projectors and relevant training models. Bedside teaching is mainly focused on infant care skills. Training curriculum and courseware already standardized, which are taught from the first day to the fifth day. But for bedside teaching, appropriate adjustments shall be made on the basis of the 5-day training schedule in combination with the self-evaluation of caregivers and the evaluation of teachers. The differences in the compliance rate of childcare ability, anxiety and hospital discharge readiness of the main caregivers before and after the intervention were compared.

Results/Outcomes/Findings: After the intervention, the compliance rates of parenting ability and discharge preparation of the main caregivers of preterm infants were significantly improved ($P < 0.05$), and the anxiety was significantly reduced ($P < 0.05$).

Conclusions/Discussion: Family integrated care model can improve the parenting ability and discharge readiness of the main caregivers of preterm infants, and reduce the anxiety at discharge.

Effects of parenting styles on emotional behavior and Internalization of school-age children

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ABSTRACT

Background: The global incidence of Attention Deficit Hyperactivity disorder is about 7.2 %. The prevalence of ADHD in children and adolescents in China is 4.2 %-6.5 %, and 50.9 % sustainable to adult ADHD. About 65 % of children have one or more comorbidities. Studies have shown that parents' behavior may affect the development of children's early executive function, and positive parenting styles have a positive impact on attention deficit children. This study is to investigate the status of parental rearing style, emotional behavior and internalization of school-age children, and to explore the influence of parental rearing style on children's emotional behavior and internalization problems, so as to provide scientific basis for early family intervention of children with behavioral problems.

Method/Content: The convenience sampling method was used to study the children and their parents in the child care outpatient department of our hospital. General Information Questionnaire, Chinese version of The Children's Sleep Health Questionnaire, Strength and Difficulty Questionnaire, SDQ) and the Generalized Self-Rating Anxiety Scale.

Results/Outcomes/Findings: In this study, 326 children and their families were included. The scores of paternal support/involvement dimension and hostility/compulsion dimension were (35.98±8.42) and (16.71±6.23) respectively, Maternal support/involvement and hostility/compulsion were (38.71±6.46) and (18.20±5.52), respectively, The total score of SDQ was (10.56±4.36). Among all dimensions, peer factor was the highest score, followed by hyperactivity factor and prosocial factor, and anxiety score was (4.56±1.34). The total score of parental behavior was negatively correlated with the total score of strength and difficulty and the total score of generalized anxiety.

Conclusions/Discussion: Parents of school-age children mainly support/participate in their children's rearing style, and parental rearing style is negatively correlated with children's emotional behavior and internalization. Medical staff should pay attention to children's upbringing style and related emotional problems, and take corresponding intervention measures.

Correlation analysis between symptom clusters and quality of life in children with medical complexity

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ABSTRACT

Background: Children with medical complexity (CMC) refer to children with complex congenital or acquired diseases, severe functional disorders, and significant medical care needs, the incidence of which varies from 0.4% to 3%, but the medical expenses account for a large proportion of the children. Objective: To identify the symptom groups of children with medical complexity and explore their correlation with quality of life, so as to provide reference for accurate symptom management to improve quality of life of children with medical complexity.

Method: Convenience sampling is used. From December 2019 to December 2021, MSAS and PedsQL4.0 were used to investigate children with medical complexity in Shenzhen children's hospital.

Results: Seventy-eight valid questionnaires were collected. The top three symptoms in children with medical complexity were lack of appetite (34.6%), difficulty in concentration (30.8%) and lack of physical strength (28.2%). Four symptom groups were extracted by principal component analysis: emotional and psychological symptom group, sleep symptom group, somatic symptom group and energy deficiency symptom group. The total score of quality of life of children with medical complexity was (71.36±22.176) points. Pearson correlation analysis showed that the total score of quality of life was negatively correlated with emotional and psychological symptoms and sleep symptoms (P<0.05). Physiological function and school function were negatively correlated with emotional and psychological symptoms (P<0.05). Emotional function was negatively correlated with emotional and psychological symptoms and sleep symptoms (P<0.05). Social function was negatively correlated with emotional and psychological symptoms and sleep symptoms, but positively correlated with physical symptoms (P<0.05).

Conclusions: There are multiple symptom groups in children with medical complexity. Emotional and psychological symptom groups, sleep symptom groups and the total score of quality of life were negatively correlated. It is necessary for health care providers to develop a path-based health guidance program to alleviate symptom clusters and improve the quality of life of children with medical complexity.

A co-word clustering analysis on pediatric delirium in ICU

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ABSTRACT

Background: Delirium shows an important role in the pediatric intensive care unit. In recent years, the research interest in studies of pediatric delirium has considerably increased. This study aimed to make a macroscopic summary and clustering analysis of the research on pediatric delirium in ICU, identify research hotpots and development trends, so as to provide reference for researchers.

Method/Content: Data were obtained from pediatric delirium-related academic research articles that were retrieved through a literature search using PubMed and Web of Science Core Collection from the establishment of the database to May 24,2021. The Bibliographic Item Co-occurrence Matrix Builder2.0(BICOMB2.0) was used to extract high-frequency subject terms and generate co-occurrence matrix, the graphical clustering toolkit 1.0 (gCLUTO 1.0) was employed to conduct double-cluster analysis and visual display.

Results/Outcomes/Findings: Overall, 220 articles were included in the study, and the number of articles was steadily increasing since 2010. A total of 24 high-frequency keywords were obtained and the results revealed five hotpots in pediatric delirium, which included research on: (i)the therapeutic use of sedatives, (ii)the etiology and prevention of pediatric delirium, (iii)the diagnosis, screening and nursing of pediatric delirium, (iv)the epidemiology of pediatric delirium and (v)the drug treatment of pediatric delirium.

Conclusions/Discussion: The five research hotpots could reflect the publication trends in pediatric delirium. By providing a co-word clustering analysis can provide a direction for more related research in the future, and draw clinicians' attention on pediatric delirium.

Development of evidence-based intervention protocol on the prevention of hypothermia of the preterm infants in the delivery room and after admission to the Neonatal Intensive Care Unit (NICU)

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ABSTRACT

Background: Neonatal hypothermia, defined as a body temperature below 36.5°C, is the leading cause of neonatal morbidity and mortality, especially in preterm infants. Moreover, hypothermia may have a significant harmful consequence on the preterm infants. Therefore, thermal care interventions aimed at preventing heat loss in preterm infants upon and after admission to the NICU through the implementation of evidence-based interventions are crucial.

Method/Content: To identify effective thermal care interventions on the prevention of hypothermia of preterm infants in the delivery room and after admission to the NICU. The thermal care protocol was developed after an extensive review of evidence using databases including PubMed, CINAHL, Cochrane and Medline. A PICO format was used to frame the clinical question before conducting the database search. A PICO framework was adopted to generate the clinical question before conducting a database search.
Patient (P) - premature infants
Intervention (I) – thermal care protocol
Comparison (C) – usual care
Outcome (O) - thermoregulation, heat loss prevention and maintain temperature after admission to NICU.

Results/Outcomes/Findings: A total of 359 citations were retrieved in the keyword search conducted and 159 articles were removed because of duplication. The remaining 200 articles were reviewed, and 177 studies were excluded because they are non-RCTs. The 23 studies were read in depth, eleven randomised controlled studies were identified that pertained to effective thermal care interventions for premature infants. All eligible studies were appraised using the Johns Hopkins University's evidence appraisal tool with level IB evidence. After critical evaluation and appraisal of the available evidence, evidence-based interventions protocol on prevention of hypothermia of the preterm infants was developed.

Conclusions/Discussion: The development of evidence-based intervention protocol will help to prevent prevention of hypothermia of the preterm infants. Providing effective interventions to prevent hypothermia based on evidence from literature is crucial for the care of preterm infants.

What is the impact of birth weight corrected for gestational age on later onset asthma: a meta-analysis

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ABSTRACT

Background: Asthma is a common multifactorial disease affecting millions worldwide. The Barker hypothesis postulates an association between later onset disease risk and energy exposure in utero. Birth weight corrected for gestational age is better for measuring the infant size, which reflects energy exposure in utero. Findings on asthma and birth weight corrected for gestational age have been inconclusive. We conducted a meta-analysis to further clarify the relationship between birth weight corrected for gestational age and later onset asthma.

Method/Content: A systematic literature search of the PubMed, Web of Science, MEDLINE, and Scopus databases up to January 2021 was conducted. The subject terms were used as follows: "asthma", "allerg*", "respiratory", "birth weight", "gestational age", "birth outcomes", "intrauterine growth retardation", and "fetal growth restriction".

Results/Outcomes/Findings: We included 12 articles with data from a total of 6,713,596 people. Compared with non-SGA infants, infants small for gestation age (SGA) were not associated with an increased risk of asthma (OR=1.07; 95% CI 0.94~1.21). However, in the subgroup analysis, we found an increased risk of later onset asthma among SGA in studies conducted in Asia, with a large sample size, and defined asthma through medical records rather than questionnaires. Large for gestational age (LGA) was not associated with an increased risk of asthma when non-LGA or appropriated for gestational age (AGA) infants were used as the reference (OR=1.02; 95% CI 0.90~1.16; OR=1.01; 95% CI 0.88~1.15).

Conclusions/Discussion: These results indicated that neither SGA nor LGA was associated with an increased risk of asthma. However, considering the limitations of the research, these results should be interpreted with caution.

Effect of olfactory stimulation on premature infants fed by tube feeding

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ABSTRACT

Background: To explore the effects of olfactory stimulation on preterm infants fed by tube feeding and to provide reference for nutrition therapy for preterm infant.

Method/Content: 260 premature infants in NICU were divided into a control group of 125 cases and an intervention group of 135 cases according to the periods of hospital stay. The control group received conventional tube feeding nursing care, while the intervention group additional received olfactory stimulation on the basis of the control group: before tube feeding, the nurse used breast-milk-soak gauze to approach the nostrils of the premature infants to provide olfactory stimulation, and applied breast milk to the lips of the premature infants to provide gustatory stimulation.

Results/Outcomes/Findings: After intervention, the feeding transition time, gastric tube indwelling time, and duration of the parenteral nutrition the intervention group were significantly shorter than those in the control group ($P<0.05$). There were no significant differences in the length of hospitalization, the incidence rates of necrotizing enterocolitis, and spontaneous intestinal peroforation, between the two groups ($P>0.05$).

Conclusion/Discussion: The practice of olfactory stimulation can speed up feeding process of premature infants fed by tube feeding, and effectively shorten the feeding transition time, gastric tube indwelling time and duration of the parenteral nutrition.

Effect of integrated risk management on prevention of unplanned discontinuation of continuous renal replacement therapy in childrenr

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ABSTRACT

Objective: To investigate the effect of integrated risk management model on prevention of unplanned discontinuation of Continuous renal replacement therapy (CRRT) in children.

Method: Clinical data of 428 children who underwent CRRT in Children's Hospital affiliated to Chongqing Medical University from January 2019 to December 2020 were collected, and convenient sampling method was adopted. 168 children who underwent CRRT from January 2019 to December 2019 were used as the control group to receive routine intervention and management. 260 children who underwent CRRT from January to December 2020 were selected as the intervention group. The intervention group adopted integrated risk management of healthcare on the basis of the control group. The unplanned incidence, coagulation rate of filter, unplanned extubation rate during CRRT, average use time of single filter, occurrence of catheter-related bloodstream infection, average COST of CRRT, satisfaction of children and their families, and average length of stay were compared between the two groups.

Results: The incidence of unplanned extubation, unplanned extubation, catheter-related bloodstream infection, CRRT treatment cost and average hospital stay in the intervention group were lower than those in the control group. The average use time of single filter and the satisfaction of children and their families were higher than those of the control group, and the differences were statistically significant ($P < 0.01$ or $P < 0.05$).

Conclusion: Integrated risk management can reduce unplanned incidence, filter coagulation rate, unplanned extubation rate, catheter-related bloodstream infection rate, CRRT treatment cost and average length of hospital stay, and improve the average use time of a single filter and the satisfaction of children and their families, which is worth promoting and applying.

Study on family management mode and its influencing factors after palliative surgery of complex congenital heart disease

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ABSTRACT

Background: Post-discharge family management is closely related to the health of the child, and it can affect the unplanned readmission rate and growth and development of the child. Therefore, the purpose of this study was to investigate the current situation of family management in children with complex congenital heart disease after palliation, and to provide evidence for clinical construction of family management intervention plan.

Method/Content: Follow up 245 families of children with complex congenital heart disease who had undergone palliative surgery in our center from January 1, 2019 to August 31, 2019. The Family management measure (FaMM) Chinese version was used for investigation, including six dimensions of children's daily life, view of condition impact, family life difficulty, condition management effort, condition management ability, and parental mutuality. According to the score of each dimension clustering analysis of complex congenital heart disease after palliative children family management model of different types; Multiple logistic regression was used to find out the factors affecting different family management patterns.

Results/Outcomes/Findings: Four patterns were identified: the normal-perspective and collaborative (28.57%), the chaotic and strenuous (11.02%), the confident and concerning (21.63%) and the neutral mode (38.78%). The scores of PSI-SF and FAD, gender, age and number of operations were the factors that affected the family management pattern.

Conclusions/Discussion: Families of children with complex congenital heart disease after palliative surgery have different types of management patterns. Disease and family-related factors are the influencing factors, which conform to the Family Management Style Framework. The results can help clinical staff to effectively identify different types of family management patterns and their influencing factors, and provide targeted suggestions and interventions for families and children.

A study on the current situation of refractive errors in the Central Plains community aged 3-7 years old in the Central Plains community of Fancheng District, Xiangyang, Hubei Province

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ABSTRACT

Background: At present, poor vision has become a common bad phenomenon in children, endangering children's health. In this paper, we summarize the current situation of eye refractive error in preschool children aged 3-7 in the Zhongyuan community of Fancheng District, Xiangyang, Hubei Province.

Method: A random cluster sampling method is used. A total of 2527 preschool children aged 3-7 in 15 kindergartens in Fancheng District, Xiangyang were selected as reference objects. The vision screener was used to check and analyze, and the current situation of eye refraction in preschool children and its age distribution characteristics were summarized.

Results: Of the 2524 children sampled (2493 actually measured). There were 143 refractive errors, and anomalies accounted for 5.7% of the total number of people examined. There were 9 people with myopia, 25 people with hyperopia, and 119 people with astigmatism. Among them, 22 children were refractory among 3-year-olds, 39 were 4-year-olds, 45 were 5-year-olds, 28 were 6-year-olds, and 9 were 7-year-olds.

Conclusions: Preschool refractive error children aged 3-7 in Zhongyuan Community, Fancheng District, Xiangyang City showed an upward trend from 3 to 5 years old, and showed a significant downward trend after 5 years old. Suggests that visual acuity gradually increases with age, refractive errors are dominated by astigmatism and simple telescopicity, and farsighted refractive index develops in the direction of decreasing hyperopia. It is in line with the law of children's vision and eye refractive development.

Experience of non-suicidal self-injury among adolescent mental disorder patients: a qualitative study

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ABSTRACT

Background: Adolescent NSSI is becoming more and more serious, which has became a difficult point in the safety management of adolescent ward in psychiatric department.

Purposes: To deeply understand the psychological experience of non-suicidal self-injury in adolescent mental disorder patients during hospitalization, so as to provide reference for developing targeted nursing intervention.

Method: Eighteen adolescents with mental disorders who conducted non-suicidal self-injury during hospitalization were selected, using purposive sampling method, then semi-structured interview was conducted with them to collect data. The topic was extracted using Colaizzi's7-step analysis method.

Results: Four themes were identified: Negative emotions that are difficult to control; controlled by psychiatric symptoms; self-ambivalence; and lack of motivation for seeking help.

Conclusions: Nursing staff should pay attention to the psychological feelings of adolescent mental disorder patients with NSSI and their emotion changes, strengthen social support, and provide personalized psychological nursing, so as to prevent NSSI and ensure the safety of patients.

Nursing care of children after permanent pacemaker implantation

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ABSTRACT

Objectives: To explore the effect of meticulous nursing in the nursing of children with permanent pacemaker implantation.

Methods: 12 children with permanent pacemaker implantation were selected, and meticulous nursing was carried out.

Results: In terms of postoperative wound nursing, functional exercise, permanent support and caregiver ability, clinical nursing is to find problems in advance and intervene and actively deal with them as soon as possible. There were 2 children with postoperative infection, one with purulent secretion around the wound and the other with redness and swelling around the wound without purulent secretion. All of them were discharged smoothly after meticulous nursing. Up to now, the pacemaker wounds healed well in 12 children, the pacemaker worked well, and no other complications occurred.

Conclusion: In clinical nursing, relevant abnormalities should be found early, and the possible complications after pacemaker implantation should be intervened early, so as to reduce the anxiety of patients' families, reduce patients' pain and improve the quality of life of children. Paying attention to postoperative wound care, early functional exercise, nutritional support and improving the care ability of caregivers are of great significance to promoting the rehabilitation of children.

Nursing of a child with systemic lupus erythematosus complicated with diffuse alveolar hemorrhage

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ABSTRACT

Objective: To summarize nursing experiences of a child with systemic lupus erythematosus complicated with diffuse alveolar hemorrhage.

Methods: Comprehensive nursing intervention was carried out according to the children's condition. We have to make sure the reasonable posture, providing oxygen therapy and guide the patient cough effectively. At the same time it's necessary to provide anti-infection treatment. Developing a suitable dietary nutrition plan for patients are also important. Last but not the least, we develop different respiratory function exercise programs according to the characteristics of alveolar diffuse bleeding stage and bleeding stop stage after cooperating with doctors; AII the immplement health education are based on CICARE communication mode.

Results: The patient's condition was stable and pulmonary bleeding controlled. The patient's respiratory function recovered and was discharged on the 37th day of hospitalization.

Conclusions: Systemic lupus erythematosus complicated with diffuse alveolar hemorrhage is dangerous. Comprehensive nursing intervention can effectively improve respiratory and nutritional status, prevent secondary infection, reduce complications and promote disease recovery.

Visual analysis of the use of oral care in ventilator-associated pneumonia over the last 20 years

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ABSTRACT

Background: To understand the research hotpots and development trend of oral nursing in ventilator-associated pneumonia in China in recent 20 years, and to provide reference for theoretical research and recommendation for clinical practice of oral nursing in ventilator-associated pneumonia in the future.

Method: The CNKI database was used as a source of literature, an electronic search was performed using the following terms: "oral care", "Ventilator associated pneumonia", "VAP", "ventilator", and the literature type was set as journals. Relevant literature published from 2001 to 2021 were searched for Citespace visual analysis.

Results: In the past two decades, the number of oral nursing publications was 1054, and 69 authors were included in the atlas, forming 4 large core scientific research and academic teams. The network interoperability of the publications on the application of oral nursing in ventilator-associated pneumonia was scattered, but there was still some cooperation and exchange. The research focus is to prevent the occurrence of ventilator-associated pneumonia through oral nursing intervention for patients with mechanical ventilation, airway intubation and intensive care unit.

Conclusions: Oral nursing has been applied in ventilator-associated pneumonia in more and more diversified ways. Nursing methods are more detailed and evidence-based studies are added to guide nurses to perform oral nursing for patients with endotracheal intubation or tracheotomy with the best evidence, which effectively reduces the incidence of ventilator-associated pneumonia. However, the cooperation between different institutions is not very much. Therefore, cross-institutional cooperation should be strengthened to promote the further development of oral care in ventilator-associated pneumonia in China.

Observation on the effect of setting up intermediate care units in the general wards to nurse children with severe pneumonia

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ABSTRACT

Background: Studies have shown that many children with severe pneumonia received treatment in PICU can cause some impact to their family, and some families want their children to be treated in the general ward.

Purposes: To study the effect of intermediate care units in general wards on the treatment of children with severe pneumonia and its influence on their family.

Method: 20 children with severe pneumonia were divided into two groups according to their parents' preference. 10 of them received treatments in intensive care units (ICU) and others received the identical treatments in intermediate care units of general wards. Both the groups were treated with high flow nasal cannula (HFNC) oxygen therapy. Before the operation, the purpose and complications of the operation were fully explained to the parents of the children, and the parents' consent and understanding were obtained. Ultrasound was used in the group which received treatments in intermediate care units, in order to assist nurses in placing catheters of arteries and venous in poorer conditions. Daily routines, such as feeding, changing diapers, and observing the illness, were conducted by nurses in the ICU. However, such routines were performed by the children's parents under the nurses' guidance at intermediate care units. During the stay, the nurses conducted psychological evaluation to two groups parents.

Results: The results from children with severe pneumonia receiving HFNC oxygen therapy at intermediate care units showed several major advantages over the result from the group at ICU. First, ultrasound can improve the success rate of nurses' punctures and reduce the suffering to the children, therefore lower the adverse stimulation to parents from intermediate care units. Second, instructing parents in daily care can avoid their tension and anxiety, and reduce nurses workloads, and the hospitalization costs have been significantly reduced.

Conclusions: Setting up intermediate care units in general wards to treat children with severe pneumonia is not only able to achieve superior treatment results, but also can reduce the negative psychological impacts to the patients' parents. It also can help to cut down hospitalization and medical costs.

Effect of umbilical cord milking and delayed cord clamping on the early prognosis of preterm infants with gestational age less than 34 weeks: a meta-analysis

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ABSTRACT

Background: To explore the effect of umbilical cord milking and delayed cord clamping on the early prognosis of preterm infants with gestational age less than 34 weeks.

Method/Content: PubMed, Web Of Science, Embase, Cochrane Library, CINAHL, CNKI, Wan Fang Date, VIP database and SinoMed were searched for randomized controlled trials about umbilical cord milking and delayed cord clamping in premature infants with gestational age <34 weeks published from inception to November 2021.According to the inclusion and exclusion criteria, two researchers independently screened the literature, evaluated the quality, extracted the date, and used Review Manger 5.4 for Meta-analysis.

Results/Outcomes/Findings: Eleven articles (seven in English, four in Chinese) were included in the analysis, with a total of 1621 premature infants, 809 cases of umbilical cord milking and 812 cases of delayed cord clamping. The results of Meta-analysis showed that compared with delayed cord clamping, umbilical cord milking increased mean blood pressure [WMD=3.61, 95%CI (0.73,6.50), Z=2.45, P=0.01], but at the same time increased the rate of severe intraventricular hemorrhage [RR=1.83, 95%CI (1.08,3.09), Z=2.26, P=0.02]. There were no significant differences between the two groups in the hemoglobin, hematocrit, the number of blood transfusions, phototherapy, peak bilirubin, and incidence rate of complications(P>0.05).

Conclusions/Discussion: Compared with delayed cord clamping, umbilical cord milking is associated with the risk of severe intraventricular hemorrhage, which is harmful to the neurodevelopment of premature infants. However more high-quality, large randomized controls trials are still needed to explore the effect of UCM on the early prognosis of preterm infants.

Nursing of a child with recessive hereditary dystrophy epidermolysis bullosa under the integrated mode of medical car

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ABSTRACT

Objective: To summarize the experience of a patient with recessive dystrophic epidermolysis bullus in the integrated medical care model.

Methods: The medical care participated in the treatment and nursing of the child, and adjusted the treatment and nursing plan at any time according to the condition and skin condition.

Results: The child had successful treatment and recovered good skin condition.

Conclusion: Critically ill and special cases are difficult in clinical treatment and nursing. Through the cooperation of medical care and the formulation of treatment and nursing work, it plays a good role in the observation of the condition and treatment effect of children, and also improves the cooperation ability of the medical team.

Peptidome analysis of human milk from mothers' neonates with or without breast milk jaundice

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ABSTRACT

Background: The aim is to employ liquid chromatography tandem mass spectrometry (LC-MS/MS) to compare bioactive peptides in breast milk from breast milk jaundice (BMJ) and control group.

Method/Content: First, six mother-child pairs (BMJ group:3; Control group:3) were invited to the breastfeeding room to collect breast milk samples. The samples were transported to the laboratory on dry ice and stored at -80°C. Then, liquid - liquid extraction was used to extract lipids. Thirdly, LC-MS/MS analysis was performed after desalination and purification, which were included two steps: iTRAQ Labeling and fractionation; mass spectrometry detection. The software-ProteinPilot 4.5 (July 2012; AB SCIEX) was used for peptide identification and quantification. The uniprot-swissprot-Homo.fasta database were searched for MS/MS spectrum. Through software calculation, for the identified proteins, we believed that the unused score ≥ 1.3 (which corresponds to the identification of proteins with ≥ 95% confidence), each protein contained one unique peptide at least, and the global false discovery rate (FDR)≤ 1% at the protein level was determined as a reliable protein. As long as the fold change reached 1.5 times or more (ie, up_regulate≥1.5 and down_regulate≤0.67), and the P value ≤ 0.05 after significant statistical test, it was regarded as a significantly different protein.

Results/Outcomes/Findings: A total of 245 peptides were identified by LC-MS/MS analysis after removing the interference of other macromolecular proteins. Among 245 identified peptides, 30 peptides were differentially expressed (fold change>1.5, p<0.05), including 11 up-regulated peptides and 19 down-regulated peptides.

Conclusions/Discussion: In summary, our results suggest that some peptides may participate in immune regulation. The emergence of these peptides provides a new perspective for exploring the pathogenesis and clinical treatment of breast milk jaundice. In addition, the specific mechanism of these endogenous peptides regulating unconjugated bilirubin needs to be further studied.

Application of caregiver skill training to autistic children and parents

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ABSTRACT

Background: Autism spectrum disorder is an incurable disease, and children need long-term and even lifelong intervention training. In order to improve the intervention effect of children, this study aims to use caregiver skill training to intervene children with autism spectrum disorder and their parents. Compared with the effect of routine intervention, this study studies whether this method can bring more benefits to children with autism and their parents.

Objective: To explore the effectiveness of caregiver skills training for children with autism spectrum disorder and their parents.

Methods: 120 children with autism and their parents were randomly selected as the research object, 60 in the experimental group and 60 in the control group. The experimental group adopted the China Autism Rehabilitation Project - Caregiver Skills Training (CST) intervention, and the control group adopted the conventional intervention method. Children in both groups were evaluated by autism Behavior Rating Scale (ABC) and Social Life Ability Scale (SM) before and after intervention. Parents of children were evaluated by parenting self-efficacy scale (TOPSE), Defense Mechanism Questionnaire (DSQ), anxiety scale (SAS) and depression scale (SDS).

Results: There was no significant difference in ABC and SM scores between the two groups after intervention, and the symptom improvement in the experimental group was significantly better than that in the control group after four weeks of follow-up. The parenting ability of the experimental group was significantly improved, the score of immature defense style was reduced, and the score of anxiety was lower than that of the control group, with good maintenance effect.

Conclusion: Caregiver skill training is more beneficial than conventional intervention to improve the symptoms of children, improve the parenting ability of parents, improve the immature psychological defense mode and relieve bad emotions.

Research progress on the needs of childhood cancer caregivers: based on the framework of Maslow's hierarchy of needs theory

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ABSTRACT

Background: Cancer is a serious threat to the lives and health of children and adolescents and is the second leading cause of death among children in China. Childhood cancer has become a chronic disease requiring long-term care as survival rates have increased. Due to children's limited cognitive and self-care abilities, the role of caregivers in childhood cancer treatment and care can not be ignored. Caregivers differ in disease cognition, caring ability, coping style and other aspects, leading to their various needs in the process of caring for children. At present, there are inconsistent and unclear classification of the needs of childhood cancer caregivers.

Objective: This review explored the content and assessment tools of childhood cancer caregivers' needs. Methods: We searched CNKI, Wanfang, VIP, Sinomed, Pubmed, Medline. This review based on the conceptual framework of Maslow's hierarchy of needs theory to expound the needs of childhood caregivers.

Results: Childhood cancer caregivers had eight aspects of needs, including biological and physiological needs, safety needs, love and belongingness needs, esteem needs, cognitive needs, aesthetic needs, self-realization needs and transcendence needs. Currently, there were few assessment tools for the needs of childhood cancer caregivers and the seassessment tools were seldomly used.

Conclusions: The framework of Maslow's hierarchy of needs theory could present the multiple needs of childhood cancer caregivers clearly and intuitively. Healthcare providers should be aware of the needs of childhood cancer caregiver and incorporate effective resources and interventions into treatment and nursing. Researchers should develop and promote assessment tools that are suitable for childhood cancer caregivers to provide references and ideas for targeted interventions.

Construction and application of a clinical nursing pathway for percutaneous renal biopsy in children

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ABSTRACT

Objective: To construct a clinical nursing pathway for percutaneous renal biopsy in children and to explore its application effect.

Method: 33 children who underwent renal biopsy in our department from December 2017 to September 2019 were taken as control group, receiving routine nursing of renal biopsy. The 29 children who underwent renal biopsy from October 2019 to January 2022 were taken as intervention group, and a clinical nursing pathway for percutaneous renal biopsy in children was implemented. The State Anxiety Inventory (S-AI) was used to assess the preoperative and postoperative anxiety of the patient caregivers of the two groups. The degree of intraoperative cooperation, postoperative pain score and the incidences of postoperative complications (macroscopic haematuria, perirenal hematoma, and urinary retention) were compared between the two groups of patients.

Results: The S-AI score of the intervention group was lower than that of the control group, the postoperative pain score of the intervention group was lower than that of the control group, the incidence of postoperative haematuria, perirenal hematoma and urinary retention were lower in the intervention group than those in the control group, and the differences between the two groups were statistically significant ($P < 0.01$).

Conclusion: The clinical nursing pathway of percutaneous renal biopsy in children can standardize the perioperative nursing of pediatric renal biopsy, reduce the anxiety of children's caregivers, improve the degree of cooperation during operation, relieve postoperative pain, and reduce the incidence of postoperative complications.

Effect of different interventions on resilience in the primary caregivers of children with cancer: a network meta-analysis

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ABSTRACT

Background: During the process of treating children with cancer, the primary caregivers suffered from many psychological problems, which will not be conducive to the treatment of children with cancer. Studies have shown that enhancing resilience can alleviate these psychological problems. Nowadays, the level of resilience among primary caregivers of children with cancer is usually found to be low to middle. It is found that the resilience of primary caregivers of children with cancer would be enhanced by some intervention program. However, which kind of intervention is more effective is not confirmed. Objectives: To evaluate the effectiveness of different interventions that focused on improving resilience on the primary caregivers of children with cancer by network Meta-analysis.

Methods: Six databases, including Cochrane Library, PubMed, CINAHL, PsycINFO, the China national knowledge infrastructure, China biology medicine disc, were used for searching for related studies. The retrieval time was from inception to August 2021. Literature screening and data extraction were performed independently by two researchers. Stata SE 16 software and Addis l.16.8 software were conducted for network Meta - analysis.

Results: A total of 6 articles and 6 interventions were included, involving 327 primary caregivers of children with cancer. Network Meta - analysis showed that the application of Self-disclosure intervention and peer education intervention had statistically significant differences from routine nursing in effect on resilience in primary caregivers of children with cancer($P<0.05$). Ranked results of area under the visual assessment ranking probability graph showed that among the six intervention methods, from good to bad were: self-disclosure intervention, peer education intervention, peer support intervention, self-compassion training, routine nursing, and promoting resilience in stress management for parents.

Conclusion: Current evidence showed that self-disclosure intervention may be the most effective intervention method to improve resilience on primary caregivers of children with cancer, but it still need more high quality, large sample study to confirm.

Construction and application of early activity scheme in children with mechanical ventilation

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ABSTRACT

Background: Children with mechanical ventilation in PICU have been bedridden for a long time, It will increase the risk of decreased muscle strength, delusion and other complications, thus delaying its recovery. Early activities can prevent the occurrence of related complications and promote the recovery of children. The current early activity protocol is not fully applicable to children with mechanical ventilation in China. Therefore, an early activity protocol was constructed in children with mechanical ventilation.

Objective: To construct early activity programs for children with mechanical ventilation, and to explore the safety and effect of their clinical application.

Methods: Children with mechanical ventilation aged 3 to 14 were selected by convenient sampling method, 50 children admitted from December 2020 to July 2021 as test groups, implemented early activity program on the control group, and 50 children admitted from April 2020 to November 2020 as the control group. Vital sign changes before, during and after activity, as well as full completion rates of the early activity protocol were collected. The muscle strength levels on days 1,3 and 6, and the false rate, mechanical ventilation time and PICU time.

Results: There was no difference in the vital signs before, during, and after the activity ($P > 0.05$), and the full completion rate of the early activity protocol was 86.96%. There was no difference between day 1 and day 3 ($P > 0.05$), day 6 ($P < 0.05$), the incidence of delusion was lower than the control group, and mechanical ventilation and PICU time were less than the control group ($P < 0.05$).

Conclusion: Early activity program for children with mechanical ventilation is safe and feasible and helps to promote the early recovery of children.

Psychometric properties of the pain assessment scales for neonatal infants: an overview of systematic review

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ABSTRACT

Background: Timely and accurate assessment of neonatal pain is the key to pain management. At present, more than 40 pain assessment scales have been developed for different types of pain in various subgroups of neonates, but their reliability and validity vary greatly. It is still unclear which scale is suitable to assess neonatal pain in specific painful situations. Therefore, we aim to conduct an overview of systematic reviews to synthesize the current evidence regarding the psychometric performance of those pain assessment scales in neonates, to guide clinical practitioners and researchers to select the best pain assessment scales.

Method/Content: Electronic searches were conducted to collect systematic reviews related to psychometric properties of the pain assessment scales for neonatal infants published in the recent 5 years. Two researchers independently screened literature, extracted data, assessed the literature quality with the methodological quality assessment tool of JBI Evidence-based Health Care Centre for Systematic Review, and graded the evidence quality with the GRADE system.

Results/Outcomes/Findings: total of seven systematic reviews were included in this study, and the overall quality was high. The results of the GRADE system showed that two outcomes related to psychometric indicators were graded as "high quality" and "medium quality" respectively, five were "low quality", while the other two were "very low quality".

Conclusions/Discussion: The validity and reliability of pain assessment scales were not comprehensively tested at the different neonatal populations or different pain types. There is no single pain assessment scale available to assess all types of pain in neonates. With comprehensive psychometric evaluation, N-PASS can be used to evaluate acute or persistent pain and mechanical ventilation pain in neonates. The psychometric properties of the pain assessment scales for neonatal postoperative pain need to be further explored.

Pain management strategies for neonates – an overview of systematic reviews

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ABSTRACT

Background: Timely and effective pain management is essential for newborns. Numerous systematic reviews (SRs) have been developed to identify the effective methods of neonatal pain management. However, a large amount of information and sometimes inconsistent conclusions of these reviews could make it difficult for clinicians in NICUs to quickly make decisions. Thus, we aim to conduct an overview of SRs to present a comprehensive evidence map for neonatal pain management, which can help neonatal caregivers effectively manage pain.

Method/Content: We searched PubMed, Embase, Cochrane Library, Web of Science, CINAHL, Chinese National Knowledge Infrastructure (CNKI), Chinese Biomedical Literature Database (CBM), Wan Fang Database, Chinese Science and Technology Periodical Database (VIP), and Google Scholar to identify all relevant SRs of neonatal pain management published in the recent 5 years. Two reviewers independently extracted data, assessed the methodological quality of included SRs with a Measurement Tool to Assess Systematic Reviewers (AMSTAR) 2, and graded the evidence quality with the Grading of Recommendations Assessment, Development, and Evaluation (GRADE). We narratively summarized the results obtained from individual SRs.

Results/Outcomes/Findings: A total of forty-four SRs were included in this study, including 7 SRs concerning pain assessment, 29 SRs concerning no pharmacological interventions, and the other 8 SRs concerning pharmacological treatments. Based on AMSTAR 2, 24 out of 44 SRs were rated moderate quality, 2 were rated low quality, and 18 were rated critically low quality. With the GRADE tool, we found moderate to high quality of evidence recommended a multi-step neonatal pain management model based on pain assessment results with prevention as the premise and non-drug treatment as the mainstay.

Conclusions/Discussion: Although there was high-quality evidence to guide neonatal pain management practice, the quality of SRs of pain management in newborn infants still needs more improvement.

Research on the process and influencing factors of newborn fathers' role adaptation

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ABSTRACT

Background: Studies have found that the maladjustment of the father role of newborns may lead to anxiety, depression and other psychological problems, and have adverse effects on the character building, growth and development of newborns. Role adaptation is a phased process, affected by many factors, and different cultural backgrounds also have different needs. At present, there are different opinions on the influencing factors of the adjustment process of newborn father role, and there is no clear classification.

Objective: To explore the process and related influencing factors of newborn paternal role adaptation, and to provide the basis for specific intervention measures in different stages of transition.
Methods: CNKI, Wanfang, VIP, Pubmed, CINAHL and Medline were searched to review the process and influencing factors of newborn father role adaptation.

Results: There were six stages of paternal adaptation: observation, reorganization, suppression, transmission, grasp and embrace (successful transition), and the influencing factors of each stage were different, which could be roughly divided into four aspects: personal behavior, family support, social support and acquisition of parenting knowledge.

Conclusion: The role adjustment of newborn father is completed in different stages of complete transition, researchers should take targeted measures according to different stages of adaptation.

Analysis of stress and separation anxiety experienced by parents of PICU children-a cross-sectional study

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ABSTRACT

Background: Studies have shown that parents of PICU children have higher stress levels than parents of normal pediatric children. After discharge from hospital, 10% to 42% of the parents of PICU children had post-traumatic stress disorder (PTSD), 18 to 62% had subclinical POST-traumatic stress disorder, and 23 to 31% had anxiety. Therefore, it is important to understand the psychological situation of parents. This study is to understand the present situation of stress and separation anxiety experienced by parents of children with PICU and analyze the relevant influencing factors, so as to provide a basis for humanistic care and related research of parents of children with PICU in the future.

Method/Content: The convenience sampling method was used to investigate the parents of children admitted to pediatric PICU in our hospital from October 2020 to March 2021. The general information questionnaire, general perceived stress Scale and Maternal separation anxiety Scale were used to investigate the parents of children. The present situation and correlation of parents' perceived stress and separation anxiety were analyzed, and the influencing factors of parents' perceived stress and separation anxiety were analyzed by Logistic regression.

Results/Outcomes/Findings: After the children were admitted to PICU, the score of psychological stress was (29.92±4.53), and the score of maternal separation anxiety was (3.81±0.42). There was a positive correlation between parental stress and separation anxiety ($r=0.36$, $P<0.05$). Regression analysis showed that gender, education level and occupation were related factors ($P<0.05$).

Conclusions/Discussion: After children are admitted to PICU, their parents' psychological impact is affected by gender, education level and occupation. In the future nursing work, nursing staff should also strengthen psychological intervention for parents of children with PICU, and adopt humanistic care intervention for parents of children to improve their psychological state.

Application and effect evaluation of integrated medical and nursing active venous therapy management in critically ill children

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ABSTRACT

Objective: To explore the application effect of integrated intravenous therapy management model in critically ill children

Methods: 260 hospitalized children admitted to PICU in our hospital from January 1,2018 to December 31,2018 were selected as the control group, and 275 hospitalized children admitted to PICU in our hospital from January 1,2019 to December 31,2019 were selected as the experimental group. The control group received peripheral venous infusion as usual. Patients in the experimental group were assigned intravenous therapy together.

Results: Compared with the control group, the incidence of phlebitis was lower in the experimental group ($P<0.05$), the incidence of drug extravasation was lower ($P<0.05$), and the patient satisfaction with infusion therapy was higher ($P<0.05$).

Conclusion: The model can effectively reduce the incidence of phlebitis and drug extravasation in critically ill children, further improve the quality of care, improve patients' medical experience, improve satisfaction, and reduce doctor-patient disputes.

A multicenter cross-sectional survey on social adaptation and influencing factors of preschool children with malignanciesr

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ABSTRACT

Background: The progressive increase in the incidence and survival rate of children with malignancies is accompanied by social maladjustment, which seriously affects the quality of survival and subsequent development. The aim of this study was to investigate the current situation and influencing factors of social adaptation of preschool children with malignancies, provide a basis for preventing maladaptive outcomes in children with malignancies in China.

Method: We recruited seven tertiary children's hospitals to participate in a multi-center cross-sectional study, and used the General Information Questionnaire, the Social Adjustment Rating Scale, the General Family Functioning Scale and the Early Childhood Attachment Relationship Scale to collect information about preschool children with malignancies who were in hospital from July to December 2021.

Results: A total of 475 valid data were collected and the prevalence of social maladjustment among preschool children with malignancies was 42.94% (204/475). There was no significant difference in the level of social adjustment between cities, but it was higher in rural areas (48.45%) than in urban areas (39.15%). And the binary logistic regression analysis showed that age, region, stage of disease, presence of recurrence, family coping style, general family functioning, average hours of internet use, and early childhood attachment were factors influencing the social adjustment in preschool children with malignancies ($P<0.05$).

Conclusions: The level of social adjustment of preschool children with malignancies is moderately low, and there are significant differences between urban and rural areas, particularly in terms of psychological and behavioral aspects. Therefore, there is an urgent need to focus on the long-term adjustment of preschool children with malignancies and to develop targeted strategies to address those issues.

Study on parents' coping ability after discharge of premature infants

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ABSTRACT

Background: Preterm infants are more likely to have health problems after discharge than full-term infants. Therefore, medical staff should pay attention to whether the parents of preterm infants have enough coping ability to cope with the difficulties and challenges after discharge.

Objective: To investigate parents' ability to cope with difficulties and challenges after discharge of premature infants, and to propose corresponding intervention policies to optimize the development and prognosis of infants.

Methods: Questionnaire survey. Data were analyzed by SPSS 20.0.

Results: A total of 33 parents participated in this study. The top five with the highest score were: ① Thought that all efforts to their children were worthwhile (4.64±0.549); ② Having confidence to make children grow up healthy like others (4.52±0.566); ③ Want to spend time with children every day (4.42±0.614); ④ Knowing about not to give children leg restraints, sleep on hard pillows, and prick horse tooth (4.45±0.905); ⑤ Knowing the correct way to take oral medicine for children (4.33±0.692). The bottom five with the lowest score were: ① Can correctly use breast milk fortifier (3.18±0.983); ② Understand the growth and development of the baby, can correctly judge the growth and development of the baby (3.36±0.895); ③ Know the principle and order of adding complementary (3.39±1.088); ④ When the baby have fever, I can take simple cooling measures (3.39±0.788); ⑤ Can correctly observe the baby's digestion (3.45±0.938).

Conclusion: The coping ability of the parents of premature infants after discharge needs to be improved. It is necessary to focus on the daily care skills and the handling of special situations, formulate corresponding intervention measures, so as to improve the ability to cope with and solve the parenting difficulties.

Qualitative study on decision-making experience of decision agents in children with chronic renal failure

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ABSTRACT

Objective: To explore the real experience of decision-making agents in the treatment of children with chronic renal failure, in order to provide reference and theoretical basis for their families to make better decisions.

Method: The phenomenological method of qualitative research was used to conduct semi-structured in-depth interviews with 12 children's family members.

Results: Three themes were extracted from the decision-making experience of the decision agents of children with chronic renal failure: early decision-making: lack of health literacy, insufficient decision-making information (lack of disease-related knowledge, relatively delayed medical treatment; Limited access to knowledge and lack of ability to use information; The future is uncertain and decision-making conflicts are prominent); Middle stage of decision making: multiple factors affect decision making (promoting factors: clear values, positive attitude, decision-making assistance from doctors; Obstacles: family related factors; Adverse experiences of fellow patients); Late decision: waiting for process, thinking disease benefit JianAoGan, disease sense of benefit (waiting).

Conclusions: Children with chronic renal failure decision agents in the decision-making process is affected by multiple factors, the nurse should understand the needs of the children with decision agents, on the basis of improving health literacy, promote Shared decision-making, eventually to improve its decision-making participation and experience.

Nursing management strategy of neonates with influenza B

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ABSTRACT

Background: Influenza virus has strong infectivity, high incidence, wide spread and seasonality. The main susceptible population and communicator of influenza are children under 5 years old. The clinical manifestations are fever, headache, muscle pain, fatigue and cough. Most of them can heal themselves. However, severe complications such as pneumonia, myocarditis or encephalitis can also occur, which seriously threatens the health of children. At present, domestic and foreign research reports mainly focus on the clinical manifestations and diagnostic basis of influenza. However, there are few reports on the nursing management of children with influenza.

Objective: To explore the establishment of nursing organization and management methods for newborns with influenza B, and provide methods and guidance for newborns with influenza B in hospitals.

Method: This paper reviews 10 cases of children with influenza B admitted to the Department of Neonatology of the Fifth Medical Center of the PLA General Hospital from 2018 to 2021, and summarizes the nursing organization and management methods for newborns with influenza B from preparation to admission and then to recovery and discharge. What's more, the author invites the head nurses of neonatal department and other hospital infection control measures to implement the complete department head nurses to evaluate and put forward relevant suggestions.

Results: Through strengthening the training of nurses, formulating the treatment plan, and implementing the infection control measures in the department, all the newborn with influenza B were cured and the influenza virus did not spread.

Conclusions: Scientific, sound and effective nursing management system and maximum benefit of department resources are of great significance in the treatment of newborns with influenza B.

Application of early respiratory training program based on 4E model in children with bronchiolitis obliterans

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ABSTRACT

Background: Mechanical bronchiolitis (BO) is a serious and refractory chronic lung disease with high disability and fatality rate. It has the characteristics of long course, repeated attack, accompanied by many symptoms and high fatality rate. Early respiratory training plays an important role in improving respiratory function and promoting rehabilitation. However, the current situation of clinical implementation of BO children at home and abroad is not ideal, so effective respiratory training programs are urgently needed to promote the rehabilitation of children. This study intends to apply the early respiratory training program based on 4E model (Engage, Educate, Execute, evaluate Evaluate4 steps) to BO children and test the application effect

Method/Content: A total of 56 children with Bronchiolitis Obliterans treated in 2 wards of the department of Respiratory Medicine of a hospital from January 1, 2021 to June 30, 2021 were randomly selected as the research objects by using the number table method. The children in the first ward of the department of respiratory medicine were the control group (n=28), and the children in the second ward of the department of respiratory Medicine were the experimental group (n=28). The control group received conventional treatment, nursing and rehabilitation guidance. The experimental group set up a multidisciplinary team based on the control group, and adopted 4E mode breathing training program for intervention. The clinical symptom severity scale was used to evaluate the improvement of the clinical symptoms of the children at 24 hours after admission, at discharge, and at 3 months after admission for review. The length of stay and adverse events of the children were counted by means of medical records retrieval and questionnaire survey to evaluate the efficacy of the application.

Results/Outcomes/Findings: There was no statistically significant difference in the improvement of clinical symptoms between the two groups before intervention (<0.05).Three months after discharge, the improvement of clinical symptoms in the experimental group was better than that in the control group, and the differences were statistically significant (<0.05).The hospital stay of the two groups was 10.250±1.236 days in the experimental group, which was better than 13.890±4.289 days in the control group. The differences were statistically significant (<0.05). There were no adverse events related to respiratory training in the two groups during hospitalization. During home respiratory training after discharge, there were 1 adverse events related to respiratory training in the experimental group, which was better than 8 in the control group, and the difference was statistically significant (<0.05).

Conclusions/Discussion: Breathing training program based on 4E model can improve the clinical symptoms of BO children, shorten the length of hospital stay, reduce the incidence of adverse events related to breathing training, and ensure the safety of children.

Neonatal pain assessment and measurement in 27 Tertiary hospitals across China: a cross-sectional study

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ABSTRACT

Background: Update data are lacking on pain assessment in general newborn units and neonatal intensive care units (NICU) across China. This study aimed to determine the status of neonatal pain assessment, and the application of neonatal pain scales in clinical practice and explore whether demographics and/or other factors uniquely contribute to the status.

Method/Content: The survey was distributed in February 2021 to neonatal nurses working in 27 tertiary hospitals across China. A convenient sample of 1800 nurses were recruited in the study, of which 1774 cases were analyzed. A self-administered questionnaire including nurses' perception on pain assessment was used to collect the data. This study adhered to STROBE checklist: cross-sectional studies.

Results/Outcomes/Findings: Most of the responses came from neonatal nurses working in tertiary class A hospitals (n=1695,95.5%), where the mean of beds was 89 in neonatal units.24 (88.9%) of 27 neonatal units performed formal pain assessments, with 1397 (78.7%) neonatal nurses reported pain assessment with scales. Children's hospital assessed, documented pain and used pain measurement scales (n=819,81.98%) more frequently than general hospital or maternal and child hospital ($X2$=23.108, P<0.01).The most frequently used scales were Neonatal Infant Pain Score (NIPS) and The Premature Infant Pain Profile (PIPP), however CRIES was more common in maternal and child hospitals while CHEOPS in general hospitals. Lack of training in the use of pain assessment scales, negative attitude towards scales were significantly and unfavorably related to neonatal nurses' awareness and recognition of pain.

Conclusions/Discussion: In contrast to prior research, the coverage of neonatal pain assessment has increased over the past 5 years. However, gaps in nurses' attitudes and practices were identified among neonatal units, and the use consensus of pain measurement scales in neonates is yet to be achieved in different types of health care centers.

Evaluation of oral motor interventions combined with music therapy for premature infants

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ABSTRACT

Background: We investigate the influence on premature infants' feeding and brain function development of oral motor intervention together with music therapy.

Methods: According to the time of admission in hospital, the premature infants admitted to neonatal intensive care unit (ICU) are divided into 32 cases of purely oral motor intervention (control group) and 34 cases of oral motor intervention combined with music therapy (intervention group). In the control group, oral motor intervention is performed based on routine nursing twice a day for 5 min each time. For the intervention group we apply the same actions but at the same time play soothing music during each oral motor intervention.

Results: The oral motor function score of the intervention group is significantly higher than that of the control group on the 3rd, 6th and 9th days of interventions, and the transition time of oral feeding is significantly shorter than that of the control group. The upper boundary voltage and voltage difference of narrowband and broadband in the intervention group are lower than that of the control group on the 7th day, and the aEEG score is higher than that of the control group ($P<0.05$). On day 14 of combination therapy, the lower boundary voltage of narrowband and broadband, the proportion of mature sleep-wake cycle and NBNA score in the intervention group are all higher than those in the control group, while the narrowband voltage difference is lower than that in the control group ($P<0.05$). Conclusion: Oral motor intervention combined with music therapy can accelerate the feeding process, promote the maturity of aEEG background electrical activity, improve the performance of behavioral nerve and accelerate the development of brain function in premature infants.

Study on central venous nursing management strategy of extremely and very low birth weight neonates

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ABSTRACT

Background: Extremely and very low birth weight neonates need venous treatment for a long period. Choosing appropriate venous strategy is very important for extremely and very low birth weight neonates. This article aim to discuss the effect of central venous management and nursing strategy on the rescue and treatment of extremely and very low birth weight neonates.

Method: Convenience sampling was used to select extremely and very low birth weight neonates who were clinically cured and indwelled with central venous catheter from October 2019 to December 2020 and divide them into experimental group and control group according to their medical record numbers ending in odd and even numbers. This study was approved by hospital ethical association. Using Excel set up statistics package, SPSS 25.0 version to analysis.

Results: Umbilical vein combined with peripherally inserted central catheter in experimental group, peripheral vein combined with peripherally inserted central catheter in control group. The weight of the experimental group was 1161.29±176.16g, the control group was 1272.01±143.77g. The age of insertion was 11.05±7.68h in the experimental group and 141.67±93.62h in the control group, with statistical significance ($P < 0.05$). The days of PICC placement after UVC removal were 24.80±13.41d in the experimental group and 29.25±11.83d in the control group, which was statistically significant ($P < 0.05$). Experimental group strategy better than control group.

Conclusions: Umbilical vein combined with peripherally inserted central catheter management strategy can establish central venous access earlier, and also the preferred central venous access strategy for extremely and very low birth weight neonates. This central venous access strategy can be widely popularized and applied by neonatal department.

Children with immunodeficiency were accompanied by CNS fungal infection and reviewed in literature

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ABSTRACT

Objective: To summarize the etiology, epidemiology, clinical characteristics, therapeutic medication principles, nursing experience and prognosis of invasive candidiasis associated with the caspase-recruited domain protein 9 (caspase recruitment domain containing protein 9, CARD9) gene.

Methods: To describe the clinical data, auxiliary examination, treatment, nursing measures and follow-up results of invasive candidiasis with main clinical manifestations in a hospital in January 2021, and "CARD9" "invasive candidiasis" as the key words in PubMed database, Wanfang database, Chinese medical journal ~ 20212 literature and reviewed.

Results: Children male, 12, line "four brain room space resection and biopsy + dredge four ventricular outlet and catheter", after pathological reading, cerebrospinal fluid high-throughput examination and culture confirmed as intracranial fungal infection (Candida albicans), for children and their parents blood collection whole gene exome detection, the results found that heterozygous variation in CARD9 gene children. After intravenous treatment with antifungal drugs for 14 weeks, clinical symptoms and routine CSF were improved and discharged. After discharge, he continued to take oral treatment with antifungal drugs and had cerebrospinal fluid extracted by Ommaya sac to relieve intracranial high pressure. The child had no special discomfort and slightly poor physical strength.

Conclusions: CARD9 defects for autosomal invisible inheritance, easy to cause serious invasive fungal infection, especially CNS candidiasis, once the onset, heavy disease, long course, high complications, high mortality, should be given sufficient, long course of antifungal treatment, concurrent hydrocephalus need surgical intervention. For patients with invasive candidia disease of unknown reasons, genetic testing is recommended, and earlier identification and intervention are of significance for the diagnosis and treatment of the disease.

Application of nasal cavity negative pressure replacement combined with mechanical expectoration in nursing of term infants with pneumonia

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ABSTRACT

Background/Purpose: To investigate the application effect of nasal negative pressure replacement combined with mechanical sputum discharge in term neonatal pneumonia care.

Method/Content: The 100 children with term neonatal pneumonia who met the inclusion criteria from March 2020 to March 2021 were divided into experimental and control groups according to the principle of randomization, with 50 patients in each group. The control group only used the routine care method of children with pneumonia, and the experimental group used the nasal negative pressure replacement combined with mechanical sputum discharge on the basis of the conventional care method.

Results/Outcomes/Findings: The blood oxygen saturation in the experimental group was significantly higher than the control group; the time of the lungs, the cough, the cough reaction and hospitalization days were significantly shorter than the control group (P <0.05).

Conclusion/Discussion: The application effect of nasal negative pressure replacement combined with mechanical sputum discharge in neonatal pneumonia care is good, which can improve the clinical symptoms, reduce the pain caused by the cough reaction after oral milk, shorten the number of hospital stay, and improve the treatment effect, which is worth promoting in clinical practice.

Reliability and validity of the Chinese version of Psychosocial Risk Assessment in Pediatrics

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ABSTRACT

Background: Researches show that children in hospital may have negative emotions such as fear and anxiety when facing medical treatment and invasive procedures, which could have a short-term or long-term impact on their psychosocial status. There is any social risk assessment scales for pediatric patients in China. With the consent of the original author, the author translated the PRAP scale into Chinese and tested its reliability and validity.

Objective: To translate the Psychosocial Risk Assessment in Pediatrics (PRAP) into the Chinese version and its reliability and validity be tested.

Methods: The Chinese version of PRAP was formed after translation and cultural adjustment authorized by the original author.167 children from Children's Hospital in Shanghai from March 2021 to May 2021 were selected by convenience sampling method to evaluate the reliability and validity of the scale.

Results: The Cronbach's α was 0.711 and the half reliability was 0.626; the inter rater reliability of 5 investigators showed that the Kendall coefficient was 0.963 and the chi square value was 43.325, the difference was statistically significant (P<0.001) The content validity index of each item is 0.90~1.00. The average content validity index of the scale is 0.95. Three common factors are extracted by exploratory factor analysis, and the cumulative variance contribution rate is 62.686%.

Conclusion: The Chinese version of PRAP has good reliability and validity, and can be used as an evaluation tool to evaluate the psychosocial risks of pediatrics related to medical procedure in China. The scale was only evaluated in one institution, and the evaluation population should be expanded in the future.

Nursing care of an ultra-premature infant with post-ileostomy wound infection and stoma prolapse

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ABSTRACT

Background: The child patient was a premature infant born at 25+ weeks (birth weight: 800g), 19 days old. The infant was attacked by NEC and ileocecal enterobrosis, thus treatment ileostomy. 10 days after the surgery, the infant was firstly diagnosed with surgical site infection, as the 1# incision (1.0cm×2.0cm×0.2cm) at the abdomen and 2# incision (1.0cm×2.0cm×0.2cm); Moreover, 75% of the fundus became yellow and 25% red. The relationship between exudate and dressing was observed to be saturated and fecal odor was combined. The skin around the incisions was red and swollen; The skin temperature was high. Secretion culture showed enteroinvasive escherichia coli infection. Due to exudate from the incisions, skin integrity was rather poor at the healing sites of surgical incisions. This further affects fixity stoma base paste, aggravate seepage of ostomy-induced exudate. Consequently, incision infection became more severe, making relevant nursing measure was more difficult. After healing, intestinal canal prolaps at the stoma occurred as the infant cried. Although it was restored by means of manipulative reduction, prolaps took place repeatedly.

Purposes: To investigate nursing methods of wound infection near the stoma and conservative therapeutic methods for intestinal canal prolaps of premature infants.

Method: ① Nursing of wound infection near the stoma for the premature infant: After cleaning up the wound with normal saline, necrotic tissues were eliminated by conservative surgical debridement, trying the best to turn infected wounds into clean ones. Considering particularities of such a premature infant, thin and tender skin, a weak protective barrier, mesalt commonly used for drainage was selected as the wound dressing to suppress wound infection. 3 days later, the exudate was absorbed; and 9 days later, the wound tissue type was manifested in 50% in red and 50% in pink. As for the relationship between exudate and dressing, it is characterized by being dry, odour free and wound edge epithelization. Besides, moist wound healing dressing was properly selected in the growth period of granulation for the purpose of facilitating wound healing. On day 11, the wounds healed up. ② Nursing for intestinal canal prolaps at the stoma: Subsequent to manipulative reduction of procident intestinal canal, a drainage tube fitting with wings was used to fix the prolapsed intestinal canal. Considering abdominal characteristics of the premature infant, leakage-proof skin was utilized to make a stoma basal disc; via sutures, the drainage tube fitting fixing the intestinal canal was fastened to the independently made basal disc, on which, a one-piece ostomy bag (model 2115, Coloplast) for children's use was pasted. In this way, the ostomy bag plays a role of fixing sutures again. ③ Whole body care: The infant was premature and the birth weight was extremely low. Firstly, protective isolation should be implemented to control general infection, which was combined with reasonable feeding to improve nutritional status and a respirator to facilitate ventilation and improve pulmonary hypoplasia related problems. ④ Proper mental and continuing nursing: Nursing of stoma was performed by a professional wound therapist when the premature infant was in NICU; 45 days after ileostomy, the child patient was transferred to a general ward where parents' anxiety about stoma nursing was removed thanks to our nurses who explained and demonstrated it face to face with the help of a human enterostomy model and helped them practice, etc.

Results: On June 28, 2020 (20 days after the surgery), wounds of the child infant completely healed up. From July 1 (23 days after the surgery) when an anti-enterostomal prolapse device was administered to August 10 (43 days after the surgery), no more prolaps at the stoma occurred. On August 11, closure of ileostomy and right hemicolectomy were given. After the surgery, the child patient showed favorable prognosis.

Conclusions: In this case, not only is Mesalt innovatively used in wound nursing for premature infants, but independently prepared anti-enterostomal prolapse device as a patented product was employed. Favorable stomal wound nursing effects are achieved. Without a doubt, such precious experience is worth to be popularized.

Summary of the best evidence for pharmacological analgesia in children with venipuncture

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ABSTRACT

Background: The effectiveness of non-pharmacological analgesia in reducing venipuncture pain with children is still limited and not significant. Local anesthetics can be administered by injection, percutaneous infiltration, spray, heated diffusion and ion penetration, reducing the need for restrained immobilization. They interfere with nerve depolarization by reversibly blocking the sodium channel in nerve fibers, leading to the failure of pain signal transmission, achieving analgesic effect, which can be applied to children's veni- puncture. However, there is still no evidence summary of pharmacological analgesia.

Objective: The study aimed to retrieve, evaluate and integrate the best evidence of pharmacological analgesia in children with venipuncture, and to provide evidence-based basis for clinical formulation of pharmacological analgesia in children with venipuncture.

Method: Using the method of evidence-based nursing, questions about pharmacological analgesia in children with venipuncture were raised. Evidence were retrieved based on the model of "6S" from top to bottom from clinical practice guidelines, evidence summary, clinical decision-making, systematic review and expert consensus. Appraisal of Guidelines for Research and Evaluation were used to evaluate clinical practice guidelines. Assessment of Multiple Systematic Reviews was used to evaluate systematic review. JBI evidence appraisal and recommendation system were used to evaluate quality of studies and level of evidence.

Results: A total of 21 articles were included, including 3 clinical decisions, 5 clinical practice guidelines, 10 systematic reviews, 1 evidence summary, and 2 expert consensuses. Forty-one pieces of best evidence were summarized from five aspects: pharmacological intervention, topical anesthesia, oral administration, subcutaneous infiltration, combined analgesia.

Conclusions: This Study summarized best evidence on pharmacological analgesia in children with venipuncture, and formed recommendations, which can provide evidence for nurses and nursing managers to establish relevant nursing schemes, and have significance in guiding pharmacological analgesia in children with venipuncture.

Sinicization, reliability and validity of the Diabetes Fear of Injecting and Self-testing Questionnaire

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ABSTRACT

Objective: To translate the English version of Diabetes Fear of Injecting and Self-testing Questionnaire (D-FISQ) into Chinese, and to test its reliability and validity.

Methods: The Chinese version of the D-FISQ was developed by using Brislin's bidirectional translation, back translation and cultural adjustment. 196 children with type 1 diabetes were surveyed by convenience sampling method from September to December 2021 to evaluate the reliability and validity of the scale.

Results: The Chinese version of the D-FISQ for Patients with Diabetes contains 2 subscales, in which the FST is divided into 4 dimensions, namely, behavior (5 items), physiology (5 items), cognition (3 items), and emotion (2 items), and the FSI is divided into 3 dimensions, namely, behavior (5 items), cognition (5 items), and emotion (5 items). The content validity index of the total scale was 0.96; the Cronbach's α coefficient of the total scale was 0.897, and the Cronbach's α coefficients of the two subscales FST and FSI were 0.806 and 0.890, respectively; the retest reliability of the subscales FST and FSI were 0.831 and 0.833.

Conclusions: The Chinese version of the D-FISQ for Diabetic Patients has good reliability and validity, and can be used to evaluate the fear of children with type 1 diabetes when performing insulin injection and self-testing, and provide reference for clinical formulation of targeted care measures.

The development and application of a risk prediction model for children with acute lymphoblastic leukemia presenting with asparaginase associated pancreatitis

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ABSTRACT

Background: Asparaginase therapy is a vital agent in the treatment of acute lymphoblastic leukemia (ALL), with increasing evidence of its high importance in high-risk ALL populations. However, despite the clear clinical and biological benefits of asparaginase therapy, many patients experience toxicities. A well-known treatment-limiting toxicity is asparaginase-associated pancreatitis(AAP). Its morbidity rate was 2%-18%,case fatality rate was 2%. As a nurse, early recognition and diagnosis is the key. The early warning can be detected before the condition changes.

Objectives: To evaluate the application value in the diagnosis and outcome prediction of a risk prediction model for children with acute lymphoblastic leukemia presenting with AAP.

Method: A total of 170 ALL patients in a tertiary hospital were selected, and AAP group (n=20) and non AAP group (n=150) were compared. Logistic regression was used to establish a risk prediction model. The area under the ROC curve was used to test the model to predict the effects. Forty patients were selected to evaluate the model's effects.

Results: The study finally included PEWS score (OR=2.049), Lip (OR=2.379), AMY (OR= 1.235) to construct the risk prediction model. The model formula was: Z=2.086-0.05 × PEWS - 0.001 × Lip -0.003 ×AMY, the area under the ROC curve of this model was 0.932, with the sensitivity of 0.739, the specificity of 0.886, the youden index of 0.626.

Conclusions: The risk prediction model has satisfactory prediction effects. which can provide reference for diagnosis and outcome of AAP, can help us to use preventative treatment and nursing measures for high-risk patients.

Research Progress on prediction model of hypoglycemia risk in hospitalized patients with type 1 diabetes mellitus

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ABSTRACT

Background: Patients with Type 1 diabetes (T1DM) need to rely on insulin treatment for life, which is a high-risk population for hypoglycemia. Physiologically, hypoglycemia will damage the cardiovascular system, nervous system and cognitive function of patients and increase the risk of death. Psychologically, the fear of hypoglycemia affects patients' self-management of blood glucose, causes anxiety and depression, and affects the quality of life. Studies have shown that frequent hypoglycemia during hospitalization will prolong the hospitalization time of patients, increase medical expenses, and poor blood glucose control after discharge. Hypoglycemia risk minimization is an important part of hospitalization management of T1DM patients.

Objective: Provides references for constructing prediction models of hypoglycemia in T1DM patients.

Method: This article reviews the current status, influencing factors and prediction models of hypoglycemia in T1DM patients during hospitalization, and provides references for constructing prediction models of hypoglycemia in T1DM patients.

Results: At present, the hypoglycemia prediction model is still in the research stage. There are prediction models based on inpatient electronic medical record data, scoring prediction models, prediction models of nocturnal hypoglycemia of hospitalized T1DM patients based on a certain blood glucose value, prediction models using machine learning (ML), and so on.

Conclusions: At present, it is difficult to establish a general hypoglycemia model for hospitalized T1DM patients. Through the inpatient medical record system, the hypoglycemia risk factors are used to predict the hypoglycemia risk of inpatients, so as to realize the hierarchical management of patients. It can make full use of medical resources, which is economical, simple and feasible. It still needs to be verified by an external department. The prediction model based on CGM technology still faces the problem that there may be differences between interstitial and capillary blood glucose measurements; Due to the complexity of blood glucose dynamics, patients' sudden eating, exercise and infection cause blood glucose fluctuations, which affects the accuracy of the model. However, the current machine learning exhibition promotes the progress of the next generation blood glucose prediction algorithm, which will make a great contribution to the development of the long-awaited artificial pancreas closed-loop system. However, the technical limitations and cost of CGM hinder its routine clinical application to identify hypoglycemia. To sum up, in the process of building the model, we need to take into account the complementary nature of the model, inter-individual and intra-individual variability. Clinical application should be combined with the performance, application and cost-effectiveness ratio of the model. Further research should be carried out in the future to develop evidence-based tools to ensure that the risk of hypoglycemia in hospitalized patients is minimized.

Evidence summary for prevention of central venous catheter-related thrombosis in children

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ABSTRACT

Objective: To provide bases for clinical nursing plan of catheter-related thrombosis prevention, by searching, evaluating and integrating best evidences in children's CVC-related thrombosis.

Method: We searched UpToDate, BMJ Best Practice, JBI Evidence Synthesis, the Cochrane Library, CINAHL, Guideline International Network (GIN), National Guideline Clearinghouse (NGC), ACP Journal Club, PubMed, Yimaitong, Chinese Biomedical Literature Database, China National Knowledge Infrastructure (CNKI), WanFang Data by computer. The search time limit was from June 30,2011 to June 30, 2021. Four researchers independently screened the articles, and extracted and summarized the evidence that met the quality standards.

Results: A total of 10 literatures were included, including 4 guidelines, 3 expert consensus, 2 evidence summary and 1 systematic evaluation. This paper summarizes 24 evidences from 5 aspects of standardized placement, use, maintenance and thrombosis prevention of central venous catheter in children.

Conclusions: The prevention of central venous catheter-related thrombosis in children should first be evaluated, the risk level of thrombosis should be determined, risk factors should be analyzed, the procedure of central venous catheter placement and maintenance should be standardized, and drug or non-drug prevention should be carried out for children.

Construction and application of enhanced recovery after surgery for children with ventricular septal defect treated by minimally invasive thoracic closure

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ABSTRACT

Background: The concept of Enhanced Recovery After Surgery (ERAS) is applied to adults in the perioperative period to achieve enhanced postoperative Recovery of patients. Scholars at home and abroad are exploring the development and application of pediatrics and teamwork. The treatment of Ventricular Septal Defect (VSD) via thoracic minimally invasive occlusion is characterized by small trauma and rapid recovery, but still has a high incidence of cardiovascular adverse events. The application of the integrated working mode of medical care based on the theory of self-efficacy is expected to enhance the perioperative management in detail and from various aspects, and achieve higher quality ERAS. In view of this, while ensuring the safety of children, our department fully performs the notification and actively applies medical treatment, according to the indications of children and the wishes of parents, ERAS' working mode of integrated nursing has developed a minimally invasive thoracic plugging treatment scheme for VSD and achieved enhanced recovery.

Objective: To develop ERAS treatment protocol of minimally invasive thoracic closure for pediatric VSD and observe its clinical effect.

Method: Children with VSD who were admitted to our department from April 2020 to October 2021 and suitable for minimally invasive thoracic closure were selected as the observation group, and ERAS management was administered from before admission to after discharge. Children with VSD who underwent conventional thoracotomy and CPB surgery were taken as the control group, and routine management was carried out. The differences in hospitalization indicators and the adverse cardiovascular events such as readmission within 3 months after discharge were observed between the two groups.

Results: The operation time, CVC catheterization rate, postoperative ventilator support time, VIS score, chest drainage tube catheter time, hospitalization days, hospitalization costs of the observation group were significantly lower than the control group. There were no adverse cardiovascular events such as readmission within 3 months.

Conclusions: The patients with VSD treated by minimally invasive thoracic closure can achieve enhanced surgical recovery and reduce the intensity of medical and nursing work.

Real experience of direct-breastfeeding for mothers of very premature infant based on stage changes

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ABSTRACT

Background: To understand the real experience of direct-breastfeeding in different stages of very premature infants' mother, and to explore the direct-breastfeeding support program for very premature infants, so as to provide a basis for the promotion of continuous breastfeeding for very premature infants.

Method/Content: The phenomenological research method of qualitative research was used to implement indepth interviews with the mothers of 16 very premature infants in the family-like ward, and the Colaizzi analysis method was used to analyze the collected data.

Results/Outcomes/Findings: The real experience of direct-breastfeeding in different stages of very premature infants' mother can be summarized into four themes: (1) preparation period: insufficient information acquisition and cognition; (2) contact period: complex psychology of the first direct-breastfeeding by very premature infants' mother; (3) adjustment period: difficulties in the actual operation of direct-breastfeeding; (4) maintenance period: recognize the benefits of direct-breastfeeding.

Conclusions/Discussion: The real experience of direct-breastfeeding in different stages of very premature infants' mother is dynamic. Medical personnel should provide targeted support, to help mothers of very premature infant improve their knowledge of direct-breastfeeding, to solve the practical difficulties and recognize the benefits of breastfeeding, to promote the continuous breastfeeding of very premature infants after discharge and improve parents' satisfaction.

Clinical observation and nursing of nasal negative pressure replacement in the treatment of nasal obstruction in children

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ABSTRACT

Background: To investigate the effective use method and effect of nasal negative pressure replacement treatment in children diagnosed with acute upper respiratory tract infection.

Method/Content: 60 children with acute upper respiratory tract infection complicated with nasal congestion from November 2021 to January 2022 were selected and divided 30 patients into two groups according to random number table. The control group were treated with acetyl cysteine atomization twice per day for 2 weeks continuously. Treatment group: The negative nasal pressure replacement treatment was performed 15 minutes after the daily afternoon atomization on the basis of the control group.

Results/Outcomes/Findings: 30 patients in treatment group, 21 patients were cured and 6 were improved and 3 were not improved and in the control group, 30 patients were cured, 12 patients were cured, 8 patients improved and 10 were not improved. Healing rates were compared between the two groups and were statistically significant at P <0.05 after statistical analysis.

Conclusions/Discussion: Two weeks negative nasal pressure replacement treatment for children with nasal congestion with acute upper respiratory infection can significantly improve the clinical cure rate, with simple operation and high safety, children can get satisfactory embodiment effect, high comfort, and worthy of clinical promotion.

Nursing of a wilms tumor child complicated pulmonary embolism post operation

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ABSTRACT

Background: A 3 years old boy got the very peculiar Wilms tumor(IV)with cardiac cancer embolus transferred half a year ago, taken 1 time radiotherapy and 3 times chemical therapies after operation. And came to inpatient because of high grade of fever and pneumonia and found the pulmonary embolism via CT and diagnosed by CTA.

Objectives/Purposes: In order to save life and get more nursing practices about the Wilms tumor complicated pulmonary embolism.

Method/Content: Specific and humanistic nursing and preventive measures were given to the poor boy in order to prevent the embolism break off, including cure the primary affection positively, observation strictly, assessed VTE risk factor everyday and take measures according to the score, made a diet project with high vitamin and high energy avoiding high sodium in order to protect the solitary kidney function positively.

Results: The temperature was normal after two days later and acute pneumonia was cured, and the boy felt better with just a mild breathing difficulties, pulmonary embolism was stable, there was no other complication occurred.

Conclusions/Discussion: Cure the primary affection positively, anticoagulant therapy, specific nursing and cooperation between the medical staffs and patients and their family members are important, and the daily activities can be usually.

Nursing strategy of multidisciplinary team comprehensive treatment for FM in children

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ABSTRACT

Background: Fulminant myocarditis characterized with severe and extensive myocardial cell damage, often manifested as cardiogenic shock, acute cardiac failure and severe heart rhythm and even death.

Objective: To explore the nursing strategy for the comprehensive treatment of fulminant myocarditis (FM) in children.

Method: The treatment strategy and nursing strategy of FM in children were analyzed retrospectively.

Results: 4 cases of FM in children, age from 11 days to 12 years old, were treated successfully in our hospital from January 21, 2021 to January 22, 2022. The extracorporeal membrane oxygenation (ECMO) combines with mechanical ventilation (MV) applied in 2 cases; heart temporary pacemaker applied in 1 case. The key of nursing is to closely observe the changes of the disease, especially the cardiac insufficiency and malignant arrhythmia. Comprehensive treatment based on life support is the latest treatment of FM. Once pediatric advanced life support (PALS), such as the ECMO, MV, CRRT were applied, biochemical indexes, tubes, wires were should observed closely. The condition changes after PALS, especially the improvement of circulatory function, should be closely observed. But, serious complications such as infection, thrombosis and bleeding should be strictly avoided. During recovery periods medication guidance and psychological counseling are also key to successful treatment and prognosis.

Conclusions: The key to successful treatment of FM in children is to start the comprehensive treatment plan based on advanced life support as soon as possible. The key of nursing care is to closely observed of the condition, to assist the maintenance of operation during the PALS, to avoid complications and to strengthen the psychological care of children and guardians.

Effect of breast milk enema on defecation in preterm infants: a randomized controlled trial

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ABSTRACT

Objective: To explore whether breast milk enema can shorten the meconium excretion time, intravenous nutrition use time and hospitalization time of preterm infants, and reduce the incidence of cholestasis, nosocomial infection and necrotizing enterocolitis.

Method: 89 premature infants with 23W ≤ gestational age < 30W were randomly assigned to 44 cases in the trial group (i.e. breast milk group) and 45 cases in the control group (i.e. normal saline group) by envelope method. Both groups of premature infants received enema twice a day. The meconium excretion time, duration of intravenous nutrition, hospitalization time, incidence of cholestasis, incidence of nosocomial infection Incidence of necrotizing enterocolitis.

Results: The meconium excretion time was [272.50 (230.50,332.13)] h in the trial group and [330.00 (255.50,423.00)] h in the control group, the difference was statistically significant (z=-2.720, P=0.007); duration of intravenous nutrition in the trial group was (777.02 ± 436.97) h and that in the control group was (961.12 ± 415.56) h, the difference was statistically significant (t=-2.037, P=0.045); There was no significant difference in hospital stay, cholestasis, nosocomial infection and necrotizing enterocolitis between the two groups (P > 0.05).

Conclusions: Compared with normal saline, breast milk defecation can shorten the time of meconium excretion and intravenous nutrition.

Analysis on the status and influencing factors of discharge readiness of parents of children undergoing day surgery

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ABSTRACT

Background: To explore the status of parents' discharge readiness of children undergoing day surgery and analyze its influencing factors.

Method: Convenience sampling method was used to investigate the parents of 300 children who received day surgery in the day surgery department of a children's hospital from September 2021 to November 2021. General information questionnaire and discharge readiness scale were used to investigate the subjects, and the scores of discharge readiness and the influencing factors were analyzed.

Results: The total score of discharge readiness was 234.59±31.09. The scores of each dimension of discharge readiness were as follows: parents' personal state (7.77±1.33), children's personal state (7.75±1.20), knowledge state (8.19±1.40), coping ability (8.48±1.29), and expected support (8.65±1.33). The results showed that whether the children had other diseases and whether the children had incarceration history of inguinal hernia were the influencing factors of the parents' discharge readiness (P < 0. 05).

Conclusions: The discharge readiness of children undergoing day surgery was above average. Medical staff should provide targeted guidance before discharge to enhance parents' confidence and improve their discharge preparation.

Blood culture collecting practices in 93 Chinese hospitals compared with international recommendations for pediatric nurses: a national online survey

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ABSTRACT

Background: Sepsis is one of the most common reasons for children's death. Blood culture results are important for diagnosing and treating sepsis. Blood culture collecting practices are related to detection and contamination rates.

Objective: This study aimed to investigate blood culture collection practices in children in China.

Method: An online survey was used to investigate whether blood culture collection practices in Chinese hospitals are based on international practice recommendations. For this purpose, Chinese pediatric nurses who did blood cultures within the past 3 months were asked to complete an online questionnaire about the procedures. These results were then compared with international recommendations. Data were analyzed using descriptive statistics.

Results: With responses from 2310 participants from 93 hospitals, the questionnaires showed agreement with parts of the procedures, such as disinfecting blood culture bottle stoppers, the sequence in blood culture collection, and not using a venous indwelling needle for blood culture collection. Deviations were particularly evident in blood volume required for blood culture collection, which was different from hospital to hospital, and deviations in not putting culture bottles in the refrigerator (46.28% agreement), wearing gloves when collecting blood (35.24% agreement), not changing the needle before infusion to the bottle (30.74% agreement), and not discarding the catheter fluid when collecting specimens from peripherally inserted central catheter (PICC) line (11.51%).

Conclusions: We found large deviations between the blood culture practices and the international guidelines. Improvements in blood culture collecting practices across the country are necessary.

Age and gender differences in social support among children and adolescence with epilepsy

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ABSTRACT

Background: Epilepsy is one of the most common chronic diseases of the nervous system. Compared with healthy children, children and adolescence with epilepsy are at increased risk for social problems. Social support is closely related to health and can buffer stressful events to some extent. Social support from family members, friends, and other important members of the social system can promote disease management behaviors and reduce risk factors. Research proved that social support has a direct and indirect effect on the quality of life of epilepsy patients. Therefore, the study aimed to explore if the frequency of perceived social support and the importance of social support differences exist according to age and gender among children and adolescence with epilepsy.

Method: A sample of 316 children and adolescence with epilepsy were examined using the CASSS (the Chinese version of the Child and Adolescent Social Support Scale).

Results: Girls with epilepsy perceived more frequency of parental support than boys with epilepsy. Children with epilepsy considered parental support more important compared with adolescence with epilepsy. Children with epilepsy find teacher support more important than adolescence with epilepsy. Adolescence with epilepsy perceived more friend support than children with epilepsy. There was a significant interactions effect for gender and age among classmate support (importance) and friend support (importance).

Conclusions: Social support varies by age and gender in children and adolescence with epilepsy. Understanding the social support of children with epilepsy at different development stages and different genders can provide a healthy environment for children and adolescence to grow up. The result could provide the basis for formulating the corresponding intervention programs for children and adolescence with epilepsy at different ages and genders.

Application of nasal irrigation in the treatment of children with severe pneumonia

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ABSTRACT

Background: Pediatric pneumonia is a common and frequently occurring respiratory disease caused by bacteria, viruses or other foreign bodies. Mild children only show the general pneumonia symptoms of cough, expectoration and auscultation of wet rales. In addition to respiratory symptoms, severe children also show systemic poisoning symptoms and multi system dysfunction, which is one of the main causes of infant death. At present, the treatment of severe pneumonia in children mainly focuses on relieving cough, resolving phlegm, relieving asthma, anti-inflammatory and anti-virus. However, the effect of routine treatment is not ideal due to the children's young age, poor self resistance and inability to actively excrete sputum. Recently, it has been studied that atomization combined with mechanical assisted sputum suction can significantly improve the therapeutic effect. However, to promote the effectiveness of atomization, high efficiency requires nasal irrigation.

Method/Content: 100 children with severe pneumonia were randomly divided into control group and experimental group, with 50 cases in each group. The children in both groups were given routine treatment and nursing care such as antipyretic, cough relieving, asthma relieving, atomized budesonide and terbutaline combined with mechanical assisted sputum suction. In the routine treatment, the observation group added nasal flushing before atomization inhalation. The clinical efficacy, symptom relief time, cardiac function index, pulmonary function index and leukocyte count of the two groups were observed before and after treatment.

Results/Outcomes/Findings: The total effective rate of the observation group was higher than that of the control group, and the symptom relief time was significantly improved.

Conclusions/Discussion: After nasal flushing, atomized inhalation of budesonide and terbutaline combined with mechanical sputum suction can effectively alleviate the symptom relief time of children with severe pneumonia, and the clinical effect is significant.

The Chinese version of the Quality of Life in Childhood Epilepsy Questionnaire-16-C (QOLCE-16-C): Translation, validity, and reliability

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ABSTRACT

Background: Epilepsy is one of the most common chronic neurological diseases that adversely impact the quality of life of patients and their families. The "Quality of Life of Childhood Epilepsy Questionnaire" (hereinafter referred to as "QOLCE-16") is a 16-item measure that was designed to assess health-related quality of life (HRQOL) among children with epilepsy.

Purposes: The purposes of the study were to translate and evaluate the psychometric properties of the QOLCE-16.

Methods: The 10 steps of Principles of Good Practices for translation and cultural adaptation of measures were adopted to translate the QOLCE-16 into Chinese. After that, item analysis, floor effect and ceiling effect, internal consistency, test-retest reliability, content validity and construct validity were conducted to test its applicability in children with epilepsy in China. A total of 435 native Chinese-speaking parents with children who had epilepsy from one children's hospital were invited to take part in the study, including a cognitive interview sample of 5 and a validation sample of 430.

Results: A total of 414 objects were enrolled in our study for psychometric testing. The results of the item analysis revealed QOLCE-16-C to have good discrimination, the floor effect and ceiling effect were 0.2% and 1.0% respectively, and each item was significantly related to the total scale ($P<0.001$). The Cronbach's α value was 0.938 and the Test-retest reliability was 0.724. For validity, results showed that the QOLCE-16-C had good content validity. Exploratory factor analysis indicated it was reasonable that the QOLCE-16-C consists of four dimensions after rotation. Confirmatory factor analysis demonstrated good construct validity (X^2/df=1.698, GFI=0.913, CFI=0.974, RMSEA=0.058).

Conclusion: The Chinese version of QOLCE-16-C appears to be a culturally appropriate, valid and reliable tool to assess the health-related quality of life of children with epilepsy in China.

Investigation on the status and influencing factors of noninvasive ventilation related nasal injury in very low birth weight infants

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ABSTRACT

Objective: To investigate the incidence of noninvasive ventilation related nasal injury in very low birth weight infants (VLBWIs) using noninvasive ventilation in neonatal intensive care unit (NICU) and analyze its influencing factors.

Methods: A self-designed data collection form of non-invasive ventilation related nasal injury in NICU was used to investigate the incidence and influencing factors of nasal injury in very low birth weight infants using noninvasive ventilation admitted in the NICU of a tertiary hospital from January 1, 2019 to December 31, 2020.

Results: During the study period, 583 VLBWIs with noninvasive ventilation were included. The incidence of noninvasive ventilation related nasal injury was 42.2% in VLBWIs in the NICU, among which 26.2%, 10.3% and 5.7% were mild, moderate and severe respectively. Multivariate logistic regression analysis showed that the independent risk factors of noninvasive ventilation related nasal injury in VLBWIs were the duration time of NIPPV and CPAP, the birth weight of infants.

Conclusion: The incidence of noninvasive ventilation related nasal injury is very high in VLBWIs in the NICU. The smaller the birth weight and gestational age, the longer the hospitalization time, and the longer the duration time of NIPPV and CPAP, the easier the occurrence of noninvasive ventilation related nasal injury.

Childrearing support captured by nurses in pediatric emergency care

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ABSTRACT

Background: The number of outpatients younger than 15 years is increasing in the pediatric emergency care in Japan, and the rate of patients not needing to be hospitalized exceeds 90%. Factors for the increase in mild patients are thought to be the fall of childrearing ability by nuclear families and the increased anxiety for children's disease. The authors aims at clarifying childrearing support recognized by nurses in pediatric emergency care.

Method/Content: Interview surveys were conducted for nurses at a pediatric emergency care institution to elucidate jobs specialized in childrearing support, and childrearing support that must be practiced and enhanced. Context about the childrearing support was extracted and analyzed.

Results/Outcomes/Findings: The subjects were eight nurses with experience in children nursing for over 16 years. The interview time was 30 to 52 minutes (median 48). From the content analysis, 97 sub categories, 59 core categories and 10 themes were extracted from 301 codes. Ten themes were extracted: [Explain to parents face-to-face about caring methods when their child is in poor physical conditions], [Give information to parents about caring methods using the items of triage skill], [Cooperate with other staff when abuse and abuse risk are concerned about], [Cooperate with local community and specialized agency when abuse and abuse risk are assumed], [Supply information through out-of-hospital lectures to parents and childminders], [Specifically image childrearing support measures that allow patients to feel relieved], [Telephone consultation considering connection with parents], [Enlighten parents so that childrearing information remains in their memory], [Transfer information from initial evaluation of an emergency outpatient] and [Support childrearing standing at the position of the parents].

Conclusions/Discussion: Nurses at pediatric emergency care institution gives explanation and provide information to the parents, responds to consultation from the parents and captures the action of connecting support in cooperation with other sections as childrearing support.

Research progress of palliative care for children with cancer

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ABSTRACT

Background: This paper reviews the development, main models, main contents and influencing factors of palliative care for children with cancer, in order to provide reference for the development of palliative care for children with cancer in China

Method/Content: Palliative care, which aims to improve the quality of life of patients and their families facing life-threatening illnesses through early detection or treatment of pain and other physical, psychological or other problems, is considered an important component of childhood and adolescent cancer services. At present, palliative care for children with cancer has been widely developed in the United States and other countries, but it started late in China. Therefore, this study used Web of Science, Pubmed, CNKI, Wan fang and other Chinese and English databases to conduct literature retrieval to review the research progress of palliative care for children with cancer, in order to provide theoretical basis for the establishment and development of hospice care model for children with cancer in China.

Results/Outcomes/Findings: Models of palliative care for children with cancer include hospital-centered, family- and community-centered palliative care models, including symptom management, psychosocial support, spiritual care, and advance care planning, influenced by medical staff, parents and social culture.

Conclusions/Discussion: The development of palliative care services for children with cancer in China is still in its infancy. We should learn from the experience of palliative care for children with cancer in developed countries to provide comprehensive palliative care services, improve palliative care related policies, and strengthen medical providers and the public. to establish a palliative care service model and system suitable for children with cancer in China.

A multi-center survey of home mechanical ventilation training for ventilator-dependent children

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ABSTRACT

Background: Since the end of 1970s, with the emergence of home ventilator in United States and developed countries of Europe, care mode of patients who relied on ventilator for a long time had begun to covert from inpatient to out-of-hospital. Surveys of long-term home respiratory support program for children that carried out by foreign medical centers have proved that the family-centered mechanical ventilation care model can be implied and through this children can obtain higher quality of life. Nowadays, in pediatric intensive care units(PICU) of China, ventilator-dependent children who are transmitted from hospital to home have been studied and relevant results have been published, among which there is no training program towards caregivers before dischargement be mentioned. This study conducts a multi-center investigation in order to understand the status of home care skills training for ventilator-dependent children in intensive care units of China during their transition from hospital to home, and to provide reference for establishing standardized home care training programs for ventilator-dependent children with mechanical ventilation.

Objective: To investigate the training status of home mechanical ventilation for ventilator-dependent children in pediatric intensive care unit (PICU), and to provide basis for domestic home mechanical ventilation training programs.

Method: We carried out questionnaires to investigate training status of home mechanical ventilation care for ventilator-dependent children in PICU of 11 hospitals.

Results: Personnel who responded for healthcare training about home mechanical ventilation were nurses in 8 PICUs, doctors and nurses in 3 PICUs, and the rest of 11 PICUs did not establish multidisciplinary teams of home care training yet. Above 80.0% PICUs provided training routines include: hand hygiene techniques (10/11), suction techniques (10/11), tube feeding (10/11), lung assessment (9/11), tracheostomy care (9/11), correct drug administration (9/11), etc. But less than 40.0% of PICUs provided training of BLS technique (4/11), nutritional guidance (4/11) and rehabilitation exercise (3/11). 6 PICUs received assessment of post-training effects. Among which, 6 PICUs were assessed by operation performances, 3 were assessed by theory tests, and 1 PICU was assessed by simulation. Main obstacles of development of home mechanical ventilation care training for ventilator-dependent children were lack of standard training programs (9/11), lack of fixed trainers (6/11), caregivers fear of home caring (6/11), inability to train children with unstable primary diseases (6/11), poor learning ability of caregivers (5/11), and difficulties of caregivers to study in hospitals due to work and family reasons (5/11).

Conclusions: Care training about home mechanical ventilation in domestic PICUs is in the initial stage. There are lots of problems and obstacles during training process: Training teams that be able to conduct multidisciplinary cooperation have not been established; training mode is single and need to be enriched; standard of training programs is lacking; actors such as children' primitive disease and psychological condition of caregivers. Therefore, it is urgent to establish a family-centered training program for long-term home mechanical ventilation care in China so that care behavior of caregivers can be standardized.

Effects of music therapy on pain relief during fundus screening in 0-3 months infants: randomized controlled clinical trial

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ABSTRACT

Objective: To determine the efficacy of music therapy intervention on pain relief during Fundus Screening in 0-3 Months Infants.

Study Design: Randomized controlled trial.

Methods: The sample consisted of infants aged 0 to 3 months who required Fundus Screening. Infants were randomized into fast music group, slow music group and control group. For all the groups, Fundus Screening was performed under surface anesthesia. The music group received music therapy intervention during the pre-, intra-, and post procedural periods of the operation. Patients' heart rate, transcutaneous oxygen saturation and decibel of crying were measured. The FLACC (Face, Legs, Activity, Cry, Consolability) scale was applied for pain measurement.

Results: A total of 300 experimenters data were collected. The results of the quantitative analyses revealed reductions in pain levels as well as increases in SpO2 and satisfaction level in two music groups ($p<0.05$). Significant decreases in heart rate were observed within the slow music group ($p<0.05$).

Conclusions: Music therapy can effectively reduces pain and crying, and increases blood oxygen saturation during fundus examination of infants aged 0-3 months. Music with rhythm at 60-80 beats per minute can decreases heart rate. Music therapy must be remembered to increase infants comfort during fundus examination.

Best evidence applications for peripheral arterial catheter maintenance in children

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ABSTRACT

Background: Apply the best evidence for the maintenance of peripheral arterial catheters in children to clinical practice, improve nurses' compliance with the application of practical evidence, and reduce the incidence of peripheral arterial catheter complications.

Method/Content: Follow the clinical evidence practice application model of the JBI Evidence-Based Nursing Center, including baseline review before evidence application, practice change and re-examination of the effect of change after evidence application. Data collection was performed using non-concurrent controlled studies. A total of 733 children with indwelling peripheral arterial catheters and 94 nurses were included before and after the application of evidence for quality review, analysis of obstacles in the process of evidence application, and formulation of corresponding countermeasures.

Results/Outcomes/Findings: After the application of the evidence, among the 11 review indicators, 6 review standards with poor evidence-based compliance were significantly improved (all $P<0.05$), and nurses' knowledge, attitude and behavior of peripheral arterial catheter maintenance were significantly improved ($P<0.05$). There was no significant difference in the incidence of peripheral ductus arteriosus-related bloodstream infection, thrombosis, blockage, bleeding, subcutaneous hematoma and unplanned extubation ($P>0.05$).

Conclusions/Discussion: The application of the best evidence of peripheral arterial catheter maintenance can standardize the behavior of nurses and improve the compliance and knowledge awareness rate of peripheral arterial catheter maintenance nurses in intensive care unit, but the incidence of peripheral arterial catheter-related complications has no significant change.

Research progress of follow-up compliance of premature infants after discharge

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ABSTRACT

Background/Introduction: With the advancements of NICU treatment levels in recent years, the survival rate of premature infants has increased significantly. However, they are still prone to neurodevelopmental impairments, with 30%-50% of infants having disabilities at 2-3 years of age. The prognosis of premature infants depends mainly on follow-up after discharge from the NICU. The goal of follow-up for preterm infants is to growth monitoring, neurodevelopment and to promptly identify evolving difficulties that can be treated by early treatment. Despite the prime importance of follow-up of premature infants, the attendance rates are mediocre.

Objective/Purposes: To summarize and analyze the status quo and influencing factors of the follow-up compliance of premature infants after they have been discharged from the NICU.

Method/Research design: Pubmed, Web of Science, China Biomedical Database, China Knowledge Network, and Wanfang Medical Database were used to collect literature. To summarize and analyze the status quo and influencing factors of the follow-up compliance of premature infants after they have been discharged from the NICU.

Results: Preterm infants with low gestational age, low birth weight, and diseases such as bronchopulmonary dysplasia, necrotizing enterocolitis, retinopathy in premature infants, and intraventricular hemorrhage generally have a higher follow-up compliance. Regarding parents, the lack of social support, the large number of children, lower parental education, poor awareness of preterm infants' prognosis, and the importance of follow-up will hinder the follow-up of premature infants. Moreover, medical staff do not pay enough attention to the follow-up of preterm infants; the lack of communication with parents and the traditional hospital follow-up model will adversely affect the follow-up of preterm infants.

Conclusions: Follow-up is critical to the normal growth and development of premature infants. It requires the joint efforts of the hospital, society, and family to optimize the follow-up management of premature infants and improve their follow-up compliance.

Research progress of assessment tools for caregiver burden of spinal muscular

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ABSTRACT

Background: Spinal muscular atrophy (SMA) is a rare autosomal recessive neuromuscular disease caused by homozygous mutations in the SMN1 gene in the 5q13 chromosomal region, resulting in muscle atrophy and muscle weakness. Spinal muscular atrophy is a major lethal autosomal recessive disease in infancy, with an incidence of about 1/10000~1/5000. At present, SMA cannot be cured and requires long-term treatment and care, which will not only endanger the physical and mental health of patients, but also pose a huge challenge to their caregivers. Caregivers of SMA patients bear a high level of burden in the process of caring for patients. In the long run, it will also indirectly lead to a gradual decline in the overall quality of care for patients. Therefore, it is particularly important to assess the caregiver burden of SMA patients early, which is helpful for early intervention and improves the quality of life of patients and caregivers.

Objective: The purpose of this paper was to find out what the burden is for caregivers of SMA and what tools are available to assess the burden for caregivers of SMA.
Method: A comprehensive review of the research status and assessment tools of caregiver burden of SMA patients abroad.

Results: The physical, psychological, social, and economic burden of SMA caregivers is high, the assessment tools for caregivers burden of SMA include zarit caregiver burden interview(ZBI), parenting stress index(PSI) and assessment of caregiver Experience with Neuromuscular disease(ACEND), et al. But there are fewer tools specifically designed to assess SMA caregiver burden.

Conclusions: Long-term care of patients with SMA can place a heavy burden on caregivers, including physical, psychological, social and economic aspects, and early assessment can help improve the quality of life of caregivers and patients, but the existing tools are not specific. We can further explore and research to accurately assess caregiver burden and provide effective interventions to promote the health of SMA patients and caregivers.

A play-based intervention for children undergoing a Kidney Biopsy Procedure with local anesthesia: a cluster randomized pilot trial

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ABSTRACT

Background: Despite the safety of renal biopsy, preparing for and undergoing renal biopsy may be a source of pain and anxiety, especially for children with local anesthesia. This pilot cluster randomized controlled trial aimed to test the feasibility of the trial design, staff and participants' acceptance of the interventions and outcome measures and to provide data required to design a definitive cluster randomized controlled trial.

Method/Content: Children undergoing elective renal biopsy with local anesthesia aged 5~12 years old and their primary caregivers were screened and recruited in the nephrology and rheumatology ward from March 30th to August 30th, 2021, in a tertiary children's hospital in Shanghai, China. A week with scheduled local anesthesia was considered an eligible cluster and randomized using a remote web service. The intervention group received a nurse-led therapeutic play program. The control group received standard nurse education before the procedure. Information on demographics, cooperative behavior during the procedure, children's preoperative anxiety and pain, and parents' preoperative anxiety were blindly assessed.

Results: Twenty-two clusters and 78 children were screened, with 18 clusters and 38 eligible children. The mean age of the children was 9.6 ± 1.7 years old. All eligible children were included in the study, and the retention rate was 100%. The nurses' adherence to the protocol was 100%. Children's participation was 80.9%~100%. The completeness of observatory anxiety measurements was 80.9%~100%. The completeness of self-reported anxiety ranged from anxiety ranged from 92.1% to 97.3%.

Conclusions: The interventions could be properly delivered to children within unit settings using highly accessible gadgets. The completeness of the measurements also met the previously established criteria. Several concerns are raised about the generalizability of future definitive RCTs.

The nursing management of abdominal wound dehiscence of an infant with severe undernutrition and peristomal moisture associated dermatitis after ileostomy closure. a case study

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ABSTRACT

Background: Abdominal wound dehiscence (AWD) following ileostomy closure is a severe post-operative complication with rare report so far. The open AWD is particularly thorny for wound, ostomy, and continence (WOC) nurses when it secondary to the stoma closure.

Objective: This study presents a case of AWD which was secondary to an ileostomy closure and severe peristomal moisture associated dermatitis (MASD), describes the whole process of wound healing and discusses why the AWD occurred and how nutrients enhanced the wound healing.

Method: Baby Q had apparent scarlet MASD with a large amount of odorless exudate. (Figure 1A). Gently clean the wound bed with normal saline (Figure 1B). Use the hydrophilic silver-containing dressing as the primary dressing (Figure 1C). Use hydrocolloid dressing as the secondary dressing. (Figure 1D). Paste the ostomy pouch with a chassis which has good flexibility and high compliance on the hydrocolloid dressing. (Figure 1E). Baby Q recovered from MASD (Figure 1F). The surgical incision was completely dehiscenced after ileostomy closure (Figure 2A). Use the sliver-containing impregnated dressing as the primary dressing (Figure 2B). Using the negative pressure to prepare the wound for spontaneous healing. (Figure 2C). Use adhesive tape to pull the wound edge together (Figure 2D). Cover outer layer with a foam dressing to absorb excess drainage and seal the wound (Figure 2E). Administered meropenem and continued nutritional support. The general therapeutic nutritional management was for total parenteral nutrition gradually transitioning to parenteral nutrition and enteral nutrition, the extensive-hydrolyzed formulas, and eventually TEN, the extensive-hydrolyzed formulas (Figure 3).

Results: Patient was recovery from the severe peristomal moisture associated dermatitis and AWD, and her nutrition was significantly improved when she discharged from the gastroenterology department.

Discussion: Infants with severe MASD and malnutrition are at higher risk for AWD for complications than patients without these issues after performing the stoma closure. Nurses should be more prudent in their postoperative care.

Correlation between feeding behavior and parenting style and BMI in children with leukemia

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ABSTRACT

Introduction: The 5-year survival rate of children with acute lymphoblastic leukemia (ALL) is 90%. However, malnutrition and obesity both lead to poor prognosis in children with leukemia. The feeding behavior of parents is the main factor affecting the nutrition and diet status of preschool children. There are also studies showing that parenting styles continue to have a lasting impact on children's weight and physical activity behavior. BMI is a reliable indicator of how fat you are and how healthy you are. The objective of this study was to investigate the relationship between parents' feeding behavior and parenting style and BMI of children with leukemia. By investigating the proportion of the influence of feeding and upbringing on children's BMI, it can further help parents to control children's body mass index during maintenance treatment.

Objective: To analyze the correlation between parents' feeding behavior and upbringing style and BMI of children with leukemia.

Method: A cross-sectional survey was conducted on the parents of children with leukemia in the period of maintenance treatment in pediatric hematology department of a third grade A hospital. The relevant data were collected by general data questionnaire, feeding behavior questionnaire and parenting style scale. Regression analysis was used to analyze the correlation between each dimension and BMI.

Result: A total of 122 cases of complete data were collected. Parents' concern about weight, dietary restriction, parents' sense of responsibility for feeding, doting parenting style and screen time all affected BMI of children with leukemia. High parental anxiety about their children's weight and long screen time were both harmful factors for lowering BMI, while food restriction, overindulgence and high parental responsibility scores were beneficial factors for lowering BMI.

Conclusions: This study found that in addition to the influence of screen time on BMI of children with leukemia, parents' worry about their children's weight, diet restriction and parents' sense of feeding had a greater impact on BMI of children with leukemia. In the parenting style, overindulgence is also an important factor affecting BMI of children. In conclusion, the feeding behavior and upbringing style of parents of children with leukemia will affect the changes of BMI of children with leukemia.

Incidence and risk factors of delirium in ICU children with mechanical ventilation

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ABSTRACT

Background: To investigate the incidence and related risk factors of delirium in ICU children with mechanical ventilation.

Method: A total of 63 critically ill children who received mechanical ventilation in the Pediatric Intensive Care Unit from July 1, 2021 to December 31, 2021 were selected, and the Chinese version of the Cornell Children's Delirium Scale (revised version) was used to evaluate the patients three times a day. Whether children develop ICU delirium and collect related risk factors.

Results: The incidence of delirium in ICU children with mechanical ventilation was 45.8%, of which 84.7% occurred within 5 days of admission to the pediatric intensive care unit. Logistic regression analysis showed that age, pain, growth retardation, mechanical ventilation and benzodiazepines were independent risk factors for delirium in ICU children ($P<0.05$).

Conclusions: The incidence of delirium in ICU children with mechanical ventilation is relatively high. Nursing staff should focus on children with young age, growth retardation, and long mechanical ventilation, and actively take effective measures to relieve pain, maintain children in a light sedation state, and withdraw benzene as soon as possible. Diazepine-type sedatives to reduce the risk of delirium in ICU children.

The link between the mother-infant bonding and emotional status of premature infants' mother: a longitudinal study based on linear mixed model

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ABSTRACT

Background: Maternal-infant bonding is a critical factor of the establishment of an effective attachment relationship, the influence of mother's emotion on bonding is not to be ignored. Little is known about mothers' emotion and bonding at different stages after premature infants birth.

Objective: Explore the change trend of premature infants mothers' emotion and mother-infant bonding, as well as the correlation between these variables from hospitalization to discharge.

Method: We surveyed 198 mothers during hospitalization(T1), at 1 month (T2) and 6 months(T3) after discharge. The spearman rank correlation was used to test the intercorrelations between anxiety, depressive symptoms and maternal bonding, with the Self-rating Anxiety Scale (SAS), Self-Rating Depression Scale (SDS) and the Maternal Attachment Inventory (MAI), respectively. The linear mixed model was conducted to analyze the relationship between maternal emotion and maternal bonding at three time points, and the influence of the interactive effect between emotion and time on maternal bonding.

Results: The SAS and SDS score increased from T1 to T3, the MAI scored highest at T2 and declined at T3. SAS and SDS were negatively correlated with MAI at T2 ($P<0.05$); SAS and SDS were significantly negatively correlated with MAI and its four dimensions at T3 ($P<0.01$).We found mothers with severe anxiety and depression symptoms at T2.The MAI score of mothers with severe depressive symptoms was the lowest at T2, mothers without depression had the smallest decrease in MAI score at T3.For MAI score, mothers with severe anxiety had the largest decline and mothers without anxiety had the smallest decrease at T3.

Conclusions: Mother-infant bonding and maternal emotion changed over time, the severity of the mother's mental health problem can affect the quality of the mother-infant bonding. Healthcare professionals can develop interventions to provide the mothers with psychological support or assistance right from birth in order to ensure their well-being and promote the establishment of maternal-infant bonding at different times after delivery.

Palliative treatment of children with malignant tumor during hospitalization

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ABSTRACT

Background: Malignant tumors show a severe threat for human health, especially for children, which bring a heavy physical and emotional burden on children and their families. Nowadays, palliative care has been included in the comprehensive management of pediatric malignant, ameliorating negative emotions and improving the quality of life.

Method: Retrospective analysis was performed to detect the therapeutic effect of palliative care among the children with malignant tumors in our department. Palliative care was given from the time of diagnosis to termination of hospitalization, which included art classes, singer competitions, book corners, visiting museums, watching movies and other activities for hospitalized children. In addition, small gifts and snacks were prepared for the children and their families on traditional Chinese festival. Most importantly, our activities also include medical game coaching, such as blood collection and bone marrow puncture for dolls, which can help children better understand the medical operation and teach them how to cooperate with the treatment. All these activities were performed with the help of mental health department, nutrition department, social work department, radio station, volunteer association and other social charity organizations. The children's quality of life at admission and discharge were analyzed to evaluate the therapeutic effect of palliative care. Furthermore, the negative emotion scores of children and their families were also involved in the analysis.

Results: We found that after participating in palliative care activities, children with malignant tumors could achieve a much better quality of life. Moreover, the negative emotion of children and their families were inhibited. Children were more cooperative and had better compliance behaviors during treatment, and anxiety of children and parents was alleviated.

Conclusions: Palliative care can relieve the negative emotion of children with malignant tumors during the treatment, and improve the quality of life. As a result, the children can cooperate with the treatment of the disease much better.

Effect of cluster nursing on prevention of deep venous thrombosis of lower limbs in children with blood purification

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ABSTRACT

Background/Objective: To explore the effects of a nursing bundle for prevention of deep venous thrombosis (DVT) in lower extremities caused by blood purification in children patients.

Methods: A total of 315 patients in pediatric intensive care unit undergoing blood purification from a tertiary hospital in Changchun in 2017 were recruited as the experimental group, and received a nursing bundle, including assessment and screening, vascular protection, leg circumference assessment, nutritional support, body fluid management, body temperature management, body movement, position management, and other nursing measures; a total of 202 patients undergoing blood purification in 2016 were selected as the control group and received routine nursing. The occurrence of DVT in lower extremities was compared between two groups.

Results: In the experimental group, there were 40 cases (12.7%) of lower extremity DVT, including 36 cases (16.5%) in children aged 0-6 years, and 4 cases (4.12%) aged 7-14years old. Twenty-two cases (11.3%) occurred in children whose treatment time was longer than 24 hours, and 18cases (15%) whose treatment time was less than 24 hours. In the control group, there were 49 cases (24.3%), including 39 cases (30.7%)in children aged 0-6 years old and 10 cases (13.3%) aged 7-14 years old. Twenty-five cases (22.5%) occurred in children whose treatment time was greater than 24 hours, and 24 cases (26.4%) of children whose treatment time was less than 24 hours. The difference in occurrence of DVT between two groups was statistically significant (=11.539, P<0.05).

Conclusions: The nursing bundle can effectively reduce the incidence of DVT in lower extremities in children undergoing blood purification, especially for children older than 7 years old and whose treatment time is longer than 24 hours.

Application of foam dressing in eczema around the site of PICC catheter placement in children with tumor

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ABSTRACT

Background: After the implantation of PICC catheter in many children with tumor, varying degrees of eczema will appear on the skin under the film, resulting in unbearable itching and continuous scratching of the skin, leading to the occurrence of unplanned extubation. This has become a big problem for nursing staff. In order to solve this problem, nursing staff tried to use self-adhesive soft silicone foam dressing to improve local symptoms after literature review and clinical observation, and got a good effect.

Objective: The purpose of this study is to observe the therapeutic effect of self-adhesive soft silicone foam dressing on eczema around the site of PICC catheter placement in children with tumor.

Method: Convenience sampling method was used to select a total of 60 children with tumor who were admitted to the Department of Pediatric Oncology of the First Hospital of Jilin University from March 1, 2021 to February 1, 2022 and developed skin eczema around the site of PICC catheter placement. According to the random number table method, 60 children were randomly divided into control group and treatment group. Desonide cream was used in the control group, and self-adhesive soft silicone foam dressing was used in the treatment group for local skin dressing care of eczema once per day, then to compare the therapeutic effect of the two groups.

Results: Compared with the control group, the therapeutic effect of the treatment group (including the effective time and the total numbers of dressing changes), was significantly better than the control group, and the difference was statistically significant ($P<0.05$).

Conclusions: Self-adhesive soft silicone foam dressing can effectively treat eczema around the site of PICC catheter placement in children with cancer, effectively absorb exudate, reduce dressing change times, relieve the pain of children with cancer, and reduce the economic burden of their families. It can be popularized in clinical use.

Evaluation of effective strategies in the prevention of chemotherapy induced mucositis among children single centre study

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ABSTRACT

Background: Oral mucositis is a frequent side effect of anticancer treatments. It impairs the patient's quality of life, aggravate clinical condition, increase the risk of infection and can delay anticancer treatment. This is common and painful side effect of many form of chemotherapy and radiotherapy. The erythematous, atrophic, and ulcerative lesions that develop are a consequence of epithelial damage.

Method/Content: A cross-sectional survey was conducted from date 8/5/2020 to 11/8/2020 at Children cancer hospital karachi. 73 admitted patients were in the study using convenient sampling, team approached eligible patients and informed consent was obtained from parents. A standardized questionnaire was then administered in Urdu (Pakistan's national language).

Results/Outcomes/Findings: 11% of patients reported that they frequently or always suffered from oral ulcer and use mouth washes for gargles; however 79.5% reported that they rarely or never suffered from oral ulcer and use mouth washes. In contrast, 9.6% patients reported that they rarely or never suffered from oral ulcer and do not use mouth washes, whereas none of the patients who reported that they do not use mouth washes for gargles had suffered from oral ulcer frequently or all the time.6 .8% of the patients experienced oral ulcer frequently or always and brush once in a day, 2.7% experienced oral ulcer frequently or always and brush twice or more in a day and 1.4% don't brush and suffered from oral ulcer frequently or always. Conversely, 27.4% never or rarely had oral ulcer and brush once in a day, 54.8% never or rarely had oral ulcer and brush twice or more in a day and 6.8% don't brush use mouth wash and had never or rarely experienced oral ulcer.

Conclusions/Discussion: The use of proper oral hygiene protocol can decrease the risk of chemotherapy induced mucositis. Majority of the patients at NIBD and BMT understand the importance of oral hygiene, Further more oral hygiene can decrease levels of oral mucositis and eventually decrease inpatient admissions, delays in treatments and improving the quality of life.

Reduceses the phlebitis among pediatric population after provided care at time of insertion, manaitance and removal

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ABSTRACT

Background: Peripheral venous cannulation is a common procedure used in hospital to deliver fluid & medicine. Phlebitis (inflammation of the vein can be caused by chemical, mechanical or infectious irritation. Thrombophlebitis is due to one or more blood clots in a vein that cause inflammation. Thrombophlebitis usually occurs in leg veins, but it may occurs in an arm or other parts of the body.

Method/Content: The observational prospective study investigated to observe the phlebitis and blood stream infection rates among paediatric population from October 2021 to January 2022 by Infection control department of Indus hospital and health network to compared the rate of infection and phlebitis before and after intervention of patients between 1-10 years of age. Interventional activities including staff education and demonstration and continuous observation applied care bundle.

Results/Outcomes/Findings: Before intervention we have observed 507 patients have peripheral line and 16 (3.1%) have developed phlebitis grad 2 and 3, after intervention 394 patients were observed 0% phlebitis and blood stream infection.

Conclusions/Discussion: Studies in various setting been showed the result that infections related to devices can be reduced by adopting aseptic techniques, choosing the catheter bore and puncture site appropriately, and using the best scientific evidence, could contribute to success in reducing phlebitis related to the use of peripheral intravenous devices. The implantation of institutional protocols and care guidelines, which aim to prevent phlebitis, are essential for safe care. Considering that phlebitis is an adverse event which it is possible to prevent, nurses have a central role in care involving intravenous therapy.

Impact of care bundle on ventilator patients to reduce infection in PICU in tertiary care hospital

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ABSTRACT

Background: Ventilator-associated pneumonia is the most common intensive care unit-acquired infection. Care bundle is a set of investigation that, when used together significantly improved patient outcome. Multidisciplinary teams work to deliver the best possible care with the ultimate outcome of improving patient care.

Method/Content: It's a Retrospective study conduct in the PICU between 2019 to 2021.age 1month to 17 years. Exclude community acquired VAP & Include Hospital Acquired VAP. Three element ventilator-associated pneumonia prevention bundle, consisting of head-of-bed elevation, oral chlorhexidine gel, and a weaning trial protocol. Data drawn from HMIS, denominator sheet and nominator were from NHSN VAP diagnoses criteria.

Results/Outcomes/Findings: The result shown that before intervention VAP care bundle in PICU 4.61/ 1000 device days. After the implementation of VAP care bundle in PICU 1.20/1000 device days.

Conclusions/Discussion: This study set out to establish the effects of systematically implementing a VAP prevention bundle that reduce VAP incidence in PICU.VAP is associated with prolonged patient on vent in hospital stay lead to greater illness costs, and possibly higher mortality. Several clinical interventions have been found to reduce the incidence of VAP, applying VAP care bundle is one of them. Over the year Realistic comparisons and may positively impact on patient safety and meet infection control standards.

Pediatric Early warning Score (PEWS) improving the trends of clinical assessment, prevention of mortality and clinical deteriorations among pediatric general patients

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ABSTRACT

Background: Pediatric patients are always at risk for deterioration and clinical decline due to the nature of disease, therapies, and modalities of treatment. Such conditions required close monitoring and rapid response to the altered body response and homeostasis. The patient who experiences clinical decline must exhibit various clinical symptoms before deteriorations. These symptoms need to be understood and measured in a well-structured and standard way so that early intervention and escalation of care can be offered. Pediatric Early warning (PEWS) is one of the standard scoring systems that help health care workers including Nurses and Physicians to identify patients at risk and help to establish goals and focus on a plan of care.

Method/Content: Several papers were reviewed using multiple databases to understand the applicability of this tool. We have selected the Brighton PEWS Score for this project. The project has been executed over three months from October 2021 to January 2022. Total number of patients has been evaluated was 599pediatric general ward patients.

Results/Outcomes/Findings: We have identified a positive response to the PEWS. Numeric values based on assessment indicate that may help generate timely response resulting in improved clinical outcomes by reducing incidences of cardiopulmonary resuscitation, septic shock, and timely management of emergencies. Many patients have been early identified and provided immediate treatment, 30% patients have been put into close monitoring and 0.5% of patient has been shifted timely to intensive care. We have also achieved zero crash calls over the period.

Conclusions/Discussion: PEWs is the standard form of assessing the patient for the illness and the score serves as a bedside instrument that may help trigger timely response in case of any clinical deterioration. Overall, we have found good outcomes in terms of improving trends of clinical deterioration and reducing pediatric mortality.

Health literacy status and influencing factors of parents with child occlusive bronchitic

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ABSTRACT

Background: Bronchiolitis obliterans, BOis a kind of bronchioles inflammatory damage caused by ventilation disorder as the main clinical symptoms of chronic airflow limited syndrome. The serious influence children's physical and mental health and quality of life. Children BO incidence increases year by year in recent years, but at home and abroad, there is no generally accepted clinical treatment guidelines, Many experiences in treatment and symptomatic support is given priority to, and a lack of long-term management, causes most patients prognosis is poorer. R As a special group, children mainly relies on the care of parents, parents health literacy, not only affect their own health, can also affect the physical and mental development of children. Therefore, concerned parents health literacy is important for children disease management.

Objective: To investigate the current situation of health literacy of parents of children with bronchiolitis obliterans (Bo) and analyze its influencing factors, so as to provide basis for all-round long-term management of children with Bo.

Method: Using the convenient sampling method, 108 children with Bo and their parents hospitalized in the respiratory department of a children's Hospital in Hunan Province from January to December 2020 were selected as the research objects. general information questionnaire, chronic disease health literacy scale and FHI of Chinese version used to investigate.

Results: The total score of health literacy of parents of children with Bo was (101.71 ± 13.13), and the rate of health literacy was 66.7%; Univariate analysis showed that there were significant differences in children's age, parents' educational level, family monthly income, family location and family structure ($P<0.05$); Pearson correlation analysis showed that family resilience was positively correlated with health literacy ($P<0.01$); Multiple linear regression analysis showed that family monthly income, children's age and family tenacity score were the main influencing factors of Bo children's parents' health literacy ($P<0.05$).

Conclusions: The health literacy of parents of children with BO is at a middle level. It is suggested that medical staff develop scientific and reasonable health education for the influencing factors, improve the level of parental health literacy, and promote the all-round long-range management of children with BO.

Observation of the effect of "Internet +" continuous nursing mode on the growth and development of premature infants and maternal anxiety

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ABSTRACT

Objective: To explore the effect of continuous nursing of "Internet +" information-motivation-behavioral skills (IMB) model on the growth and development of premature infants, mothers' cognition of child rearing and mental health.

Method: A total of 96 premature infants and their mothers who were admitted to the NICU from February 2020 to February 2021 in this hospital were selected as the research objects. They were divided into the control group and the observation group according to the random number table method, with 48 cases in each group. The control group was given routine continuous nursing measures, and the observation group was given the "Internet +" IMB model nursing intervention on the basis of the control group. After a 6-month follow-up, the physical development, neurobehavioral score, maternal cognitive level of preterm infants, maternal psychological anxiety and depression were compared between the two groups.

Results: The length, head circumference and body weight of the preterm infants in the observation group were significantly higher than those in the control group ($P<0.05$); the total neurobehavioral scores of the preterm infants in the observation group were significantly higher than those in the control group ($P<0.05$); the parenting cognitive scores (disease protection, daily care, rehabilitation, and social services) of the mothers of preterm infants in the observation group were significantly higher than those in the control group ($P<0.05$). Monthly psychological anxiety, depression and depression scores were lower than those of the control group ($P<0.05$).

Conclusions: The continuous nursing of "Internet +" IMB model can effectively promote the growth and development of children, improve the cognitive level of mothers in parenting, and relieve anxiety and depression.

Sense of coherence among Japanese fathers of children with chronic illnesses

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ABSTRACT

Background: Against the background of ever-changing medical and social environments, parents of children with chronic illnesses seek support not only for medical treatment but also for various situations in education and daily life. However, there is insufficient assistance for the fathers of these children. Thus, this study focuses on the fathers of children with chronic illnesses in an effort to clarify how the stressor and the father's sense of coherence (SOC) influence their mental health.

Method: This study was approved by the Ethics Committee of the Tokyo Healthcare University, Japan. We conducted a self-reported questionnaire survey of 425 Japanese fathers of children with chronic illnesses. The data from 51 respondents were statistically using ANOVA. The dependent variables were the stressor of the fathers and depression, and significance was set at 5% (two-sided) (Fig.1).

Results: The average age of the fathers was 41.6 ± 6.3 years. The most prevalent chronic illnesses of the fathers' children were allergic disease (n =19, 22.6%), heart disease (n = 17, 20.2%), and respiratory disease (n = 15, 17.9%). The fathers' stressor was significantly related to their SOC(p=.016). Furthermore, the SOC of the fathers majorly influenced their mental health, while having a buffering effect on the stressor with respect to depression(p=.038) (Fig.2).

Conclusions: Our findings underscore the importance of maintaining the mental health of fathers of children with chronic illnesses while being exposed to stressors in daily life and enhancing SOC to reduce the stressors of these fathers with respect to depression. Furthermore, based on SOC theory, it was suggested that nursing support might be useful.

Analysis on the fine management of intelligent pediatric outpatient service mode under the new situation

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ABSTRACT

Objective: Based on fine management, the use of innovative service mode, to create an efficient and intelligent pediatric outpatient service.

Method: Introduce fine management concept and technology, for the pediatric outpatient waiting time, poor environment, poor doctor-patient communication existing problems, adopt standardized service behavior, reasonable deployment of human resources, introduce process management, shorten the waiting time, strengthen doctor-patient communication, pay attention to humanistic care, improve the medical environment details management.

Results: After the fine management, the medical staff worked orderly, and the average waiting time was shortened from (40.3 ± 3.9) min to (12.6 ± 3.6) min; the parental satisfaction increased from 81.13% to 95.66%.

Conclusions: Fine management service mode in pediatric clinic is an effective management innovation method, which is worth promoting.

A qualitative study on disease communication between parents and adolescents with congenital heart disease

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ABSTRACT

Background: Congenital heart disease (CHD) is the main birth deformity in China. The mortality rate of congenital heart disease decreased and more and more children with congenital heart disease entered adolescents or transitioned to adulthood. Family disease communication is an important correlate of adolescent development, psychosocial and health outcomes. Communicat with children about their disease and related problems could reduce their uncertainty and improve their quality of life.

Objective: To explore the communication experience between parents and adolescents with congenital heart disease.

Method: Using phenomenological research method, parents of 20 adolescent patients with congenital heart disease who underwent cardiac surgery in a tertiary pediatric hospital in Shanghai from March 2020 to July 2021 were selected for semi-structured interview, and Colaizzi's seven-step analysis method was used to analyze the data and summarize the themes.

Results: The experience of disease communication between parents and adolescents with congenital heart disease can be summarized into three themes: ① Lack of relevant information and support in communication decision-making; ② Facing the challenges from adolescent children in the process of communication; ③ Full of worries about the future during the communication.

Conclusion: Disease communication between parents and adolescents with congenital heart disease is extremely lacking. Parents are facing many challenges. Medical staff need to provide individualized disease information, communication skill training, and a diversified communication platform for adolescents with congenital heart disease and their parents.

Section 2: Primary Health Care and Community Child Health

The influence of home parenting environment on the growth and development of infants and toddlers

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ABSTRACT

Background: The first 1000 days of life had been shown to be a critical period for the physical and neurological development in infants and toddlers. The family was the primary environment for the growth of children up to age 3.A good family nurturing environment promotes early cognitive, language, social-emotional and motor development in infants and toddlers. The World Health Organization (WHO) Framework for Parenting and Care emphasizes the importance of family-centered parenting and care practices to improve the overall parenting and care capacity of families.

Purpose: To analyze the effects of home parenting environment on infant development within 1 year of age and to provide evidence for the promotion of the nurturing care framework for early childhood development published by WHO in China.

Methods: 120 infants attending the Department of Child Health Care, Zhongnan hospital of Wuhan University from January to August 2019 were randomly divided into a control group and an intervention group, with the control group given routine physical examination and health guidance, and the intervention group given relevant interventions on this basis, including parent-child classes, one-on-one guidance, and online WeChat platform intervention. The Family Parenting Environment for Infants and Toddlers from 0 to 1 Year of Age (Urban Version), Evaluation Method of Chinese Infant and Toddler Feeding Indicators at 6-24 Months of Age, and Children's Neuropsychological Development Scale at 0-6 Years of Age were used for the evaluation of 120 infants.

Results: The intervention group had higher length, weight, and head circumference than the control group, and the differences were statistically significant(P<0. 05). The rate of good home environment in the intervention group was 81.67%, which was significantly higher than that in the control group (28.33%), and the difference was statistically significant (X^2=34.48, P<0.001). Except for the "neglect/punishment latitude", the scores and total scores of the three dimensions of "emotional warmth/Environmental climate, social adjustment/self-care, and language/cognition" were significantly higher in the intervention group than in the control group (P<0.01).

Conclusions: A good family nurturing environment had a degree of positive impact on the early growth and development in infants and toddlers.

The study on the effect of earthquake disaster preparedness training for hearing impaired children in special education schools in Sichuan, China

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ABSTRACT

Background: In the earthquake-prone Sichuan region, hearing-impaired children, as a vulnerable population, are facing great risks. However, in special education schools, there is a serious lack of earthquake preparedness training for hearing-impaired children. Therefore, it is necessary to carry out targeted earthquake preparedness training for them.

Objective: To verify the effectiveness of earthquake preparedness training program for hearing-impaired children in special education schools, to improve their knowledge, skills and attitude of earthquake preparedness.

Method: This study adopt a randomized controlled trial. Hearing-impaired children in four special education schools in Sichuan were selected by convenience sampling. We take the school as a unit and stratify according to the number of the hearing-impaired children, and they were cluster randomized to intervention group (n = 55) or control group (n = 49). The intervention group was given earthquake preparedness training by using the intervention scheme, while the control group was given self-study by using the Disaster Preparedness Handbook with the same content. Before, immediately after the training and two months later, the questionnaire that has passed the reliability and validity test were used to measure, and compare the scores of earthquake preparedness knowledge, skills and attitude before and after the training between the two groups.

Results: The results of the two groups were compared by repeated measures analysis of variance, correcting with grade as covariates. Compared with the control group, the hearing-impaired children trained by the intervention program effectively improved their scores of disaster preparedness knowledge and skills ($P < 0.001$), but there was a downward trend two months later, and there was no significant difference in their scores of disaster preparedness attitude ($P = 0.105$).

Conclusions: The intervention program can effectively improve the earthquake preparedness knowledge and skills of hearing-impaired children, but the training effect will weaken as time goes on, and a single intervention training can not effectively affect the earthquake preparedness attitude of hearing-impaired children. This finding provides a reference and basis for the further development of earthquake preparedness training program for hearing-impaired children, and has promotional value.

Enlightenment: This study suggests that hearing-impaired children can effectively participate in school earthquake preparedness training, and special education schools should take the earthquake preparedness training for hearing-impaired children as a normal school education project.

Literature review on the status of supporters when introducing care to families raising children with developmental disabilities

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ABSTRACT

Background: Families raising children with developmental disabilities find it difficult to recognize that their children have developmental disabilities. As a result, children and their families live in a state of confusion until they receive professional support. They need early support, but the process of introducing support is often difficult for both the family and the supporters. The purpose of this study was to understand the current status of supporters when introducing care to families raising children with developmental disabilities.

Method: The bibliographic databases MEDLINE, CINAHL, and Ichushi-Web were used to find the relevant studies published from 2016 to 2021. The keywords were "children," "developmental disability," "autism," "children of concern," and "family, support." The current status of supporters was categorized.

Results: The current status of supporters is as follows: 1) Promoting awareness of child developmental characteristics, 2) Creating a foundation for support, 3) Improving parents' coping and caring skills, 4) Connecting parents to support organizations, and 5) Responding to parents according to their level of acceptance. There were no criteria for support, and the supporters were struggling. The actual status of the support and its effect on the family were not clarified.

Discussion: Support for children with developmental disabilities requires long-term, continuous support based on assessments that focus on the growth and development of the child and family. It is necessary to build a relationship from the initial stage to create a partnership between the family and the supporters, to develop professional and objective indicators, and to examine the contents and evaluation of support for the family.

Effect of screen time intervention on obesity among children and adolescent: a meta-analysis of randomized controlled studies

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ABSTRACT

Background: Several studies have investigated the effect of screen time interventions on obesity in children and adolescents, but the existing results were controversial.

Objective: This study aimed to analyze the effect of screen time intervention on obesity in children and adolescents.

Method: PubMed, Cochrane, Web of Science, Embase databases were searched through December 2020 to identify publications meeting a priori inclusion criteria and references in the published articles were also reviewed.

Results: Finally, 14 randomized controlled trials and 1894 subjects were included in this meta-analysis. The results showed that interventions targeting screen time are effective in reducing total screen time (MD: -6.90 h/week, 95% CI: [-9.19 to -4.60], p<0.001) and television time (MD: -6.17 h/week, 95% CI: [-10.70 to -1.65], p<0.001) in children and adolescents. However, there was no significant difference between the intervention and control groups in body mass index and body mass index-z score.

Conclusions: In conclusion, there is no evidence that screen time interventions alone can decrease obesity risk in children and adolescents, though they can effectively reduce screen time.

Progress in application of insulin pump in the treatment of type 1 diabetes mellitus in children

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ABSTRACT

Background: Children with type 1 diabetes need lifelong insulin injection to maintain stable blood sugar levels in the body. Insulin pump provides great convenience for insulin injection. This article reviews insulin pump from four aspects: overview, application status, matters needing attention and prospects of insulin pump, aiming to improve healthcare professionals' understanding of the use of insulin pump and provide some reference for the correct use of insulin pump.

Conclusions/Discussion: Insulin pump as one of the effective way of clinical treatment of children with type 1 diabetes, simulate the human body normal pancreas function 24 hours per day continuous insulin infusion dose accurately to the human body, it can be fast and stable steady lowering blood sugar and blood sugar in a normal range, so as to improve the effectiveness of the treatment and the patient's quality of life, children with diabetes has significant curative effect, It is an indispensable and effective means for the treatment of diabetes in children. Clinical nursing and related experts should increase the understanding and study of insulin pump, and constantly improve the application of insulin pump in clinical practice.

The male and female differences of dental caries in children of different ages after physical examination in 15 kindergartens in the community were analyzed

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ABSTRACT

Objective: To investigate the male and female differences of dental caries in children aged 3-6 years.

Methods: using the method of current situation investigation and actual data analysis, the physical examination of 2519 children in 15 kindergartens in charge of children's health care department independently undertaken by our pediatric medical team in June 2021. After excluding the data of registration error, incomplete information, less than 3 years old and more than 6 years old, the actual data collected by the physical examination were divided into 1291 boys and 1090 girls, and then targeted at boys Female children aged 3-6 years old were divided into groups to analyze the differences between men and women in the occurrence of dental caries in children aged 3-6 years old.

Results: 167 boys (25.97%) had dental caries in the 3-4-year-old group; Among boys aged 4.1-5 years, 137 (39.14%) had dental caries; Among boys aged 5.1-6 years, 108 (36.24%) had dental caries. In the 3-4-year-old group of girls, 127 (23.52%) had dental caries; In girls aged 4.1-5 years, 153 (42.62%) had dental caries; 68 girls (35.68%) had dental caries in the 5.1-6-year-old group.

Conclusion: the analysis of real data shows that the incidence of dental caries in children aged 3-4 years is 2.45% higher in boys than in girls; 4.1-5-year-old girls are 3.48% higher than boys; Boys aged 5.1-6 are slightly higher than girls by 0.56%.

Analysis on KAP and influencing factors of pediatric nurses on diaper dermatitis

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ABSTRACT

Background: Diaper dermatitis is a common childhood skin disease; domestic and foreign studies have shown that the incidence of infantile diaper dermatitis is 7 % -35.1 %. Diaper dermatitis will not only increase the discomfort of infants, but also cause infection if not handled in time, and even lead to sepsis, which threatens the lives of infants. Clinical practice is an important teaching link for nursing students from theory to practice, and it is an important transitional period for students to change to nurses. The prevention and nursing of gluteal red is the basic nursing module in the nursing practice outline, and it is also the key learning content of pediatric interns in the working process. At present, there is no relevant research on internship nurses at home and abroad. This study aims to understand the current situation of pediatric internship nurses' knowledge and practice of diaper dermatitis, in order to provide a basis for formulating scientific pediatric internship training programs and updating pediatric textbooks.

Objective: To investigate the knowledge, belief and behavior status of diaper dermatitis among clinical nurses who rotate through pediatrics in tertiary hospitals, and analyze the influencing factors.

Methods: A questionnaire survey was conducted among 231 internship nurses who rotated through pediatrics in tertiary hospitals. SPSS 26.0 was used for statistical analysis.

Results: The scores of cognition, attitude and behavior of pediatric nurses on diaper dermatitis were (6.74 ± 2.12) points, (22.93 ± 3.14) points and (18.72 ± 3.36) points, respectively. Multiple linear regression results showed that the rotation time of departments and pediatrics was the influencing factor of cognitive score ($P < 0.05$), and the departments were the influencing factor of behavioral score ($P < 0.05$). Pearson correlation analysis showed that knowledge score, attitude score and behavior score were positively correlated.

Conclusion: Intern nurses have a good attitude towards diaper dermatitis, but the basic knowledge and behavior of diaper dermatitis are not optimistic, suggesting that schools and hospitals should actively carry out relevant knowledge training to promote the improvement of nursing quality.

Literature Review on Internet gaming disorder support for adolescents with developmental disabilities in Japan

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ABSTRACT

Background: Internet gaming disorder (IGD)and Internet addiction (IA) are major problems that can be seen among Japanese adolescents with developmental disabilities. In Japan, the rate of smartphone ownership among the younger population is on the rise, creating an elevated risk environment for IGD; however, effective medical and nursing support has not been identified. The purpose of this study is to clarify the current status and issues of IGD and IA of medical care and nursing for adolescents with developmental disabilities in Japan.

Method/Content: We conducted a literature search of the Ichushi-web database using the keywords ("IGD" or "IA") and "developmental disability" for Japanese papers published up to January 2022. The results were organized using a matrix table. From the literature, the content relevant to the purpose of this study was extracted and used as analytical data and were analyzed using qualitative content analysis.

Results/Outcomes/Findings: There were 6 references for the final analysis. IGD was interfering with the lives of adolescents with developmental disabilities in Japan. Three categories were identified from the search: "dependence on the internet and games", "psychological effects of using the internet and games", and "communication through the internet and games". It has been reported that on-game dependence scores are higher among children who do not attend school; and it has also been speculated that the children's life situation considerably affects their dependence on the internet.

Conclusions/Discussion: Regarding medical support, the importance of focusing not only on dependence on the internet and games, but also on the underlying life issues was mentioned in the findings. Support for daily life requires nursing support; however there was no mention of the same in this literature review.

Observation on the efficacy of pediatric negative nasal pressure irrigation in respiratory diseases in different age groups

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ABSTRACT

Objective: To investigate the efficacy of negative nasal pressure replacement techniques in children of different ages.

Method: From September 2021 to December 2021, 516 children with respiratory infections who underwent daily negative pressure nasal irrigation during their hospitalization in the pediatric department of our hospital were studied, and they were divided into three groups according to their ages: 196 cases in group A, infants and toddlers aged 0-3 years; 206 cases in group B, preschool age 3-6 years; and 114 cases in group C, school age 6-14 years. All three groups of children underwent negative pressure nasal irrigation technique during their hospitalization. We compared the symptoms of nasal congestion, runny nose, sneezing and nasal itching, the degree of improvement, the time of disappearance of sounds, the time of relief of cough, the number of days of hospitalization, and the satisfaction of the children and their families in the three groups.

Results: The symptoms of nasal congestion, runny nose, sneezing and nasal itch and the total score of children in groups A and B were lower than those in group C. The degree of improvement of the disease was significantly better than that of group C. The time of disappearance of sound, the time of relief of cough and the number of days of hospitalization were shorter than those in group C. The satisfaction of children and families in the three groups was not statistically significant.

Conclusion: The efficacy of negative pressure nasal irrigation in children with respiratory tract diseases varies by age, and the efficacy of negative pressure nasal irrigation in children under 6 years old is better.

Section 3: COVID-19 and Disaster Nursing in Paediatrics

The barriers and facilitators of COVID-19 vaccination for nurses in pediatric respiratory ward based on TDF theory: a qualitative study

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ABSTRACT

Background: In 2019, a new virus disease called COVID-19 is rampant around the world, which is highly infectious and has no effective drugs, posing a serious threat to human health. Studies have shown that vaccination is a powerful measure to address or control the outbreak and further spread of NCCP. Therefore, at the end of 2020, vaccination of healthcare providers against COVID-19 was prioritized in China, but the vaccination rate was not satisfactory at the initial stage of vaccination. Given the danger of the epidemic and the special characteristics of the COVID-19 vaccine, accelerating the vaccination is the top priority for epidemic prevention and control. Therefore, it is imperative to clarify the factors influencing the willingness and behavior of healthcare providers to receive the COVID-19 vaccine. The TDF (Theoretical Domains Framework) theoretical domain framework is based on integrating individual psychological, social, and environmental influences on behavior and aims to provide a useful conceptual basis, and the theory is currently widely used to assess facilitators and barriers prior to intervention implementation. Therefore, this study was based on the TDF theoretical framework and used semi-structured interviews to gain insight into the attitudes of nurses in several pediatric respiratory wards in Shandong Province who participated in the COVID-19 vaccination for the first time, and to explore the facilitators and barriers that influence vaccination in nurses, with the aim of providing input to improve health policy implementation during major and emergency health events.

Methods: In this study, 12 nurses worked in pediatric respiratory ward from four hospitals in Shandong Province were selected by purpose sampling in 2021. Interview outline was formulated based on TDF theory, we conducted semi-structured interview, sorted out and analyzed the interview contents by content analysis method.

Results: TDF theoretical framework was used to analyze the interview content, and finally the analysis results were mapped to four areas (knowledge, social/professional role and identity, belief about consequences, memory, attention and decision process), and the barriers and facilitators were analyzed.

Conclusion: Under the context of TDF theoretical framework, the barriers and facilitators affecting the vaccination of nurses worked in pediatric respiratory ward were discussed through interviews, which could provide guidance for healthcare policy managers to construct the relevant intervention measures.

Research on transit nursing quality improvement of critical premature infants during COVID-19

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ABSTRACT

Background: Transit of critical premature infants is an important part of emergency treatment for premature infants. There are risks of hemodynamics and respiratory instability for premature infants during inter-hospital transit. The COVID-19 is an international emergency public health event. Under the COVID-19, the transit procedure of critical premature infants from primary hospital to comprehensive hospital is strictly controlled. The transit of critical premature infants is quite difficult and risky. There is no effective guidance and related experience in nursing during transit. Relevant research is urgently needed.

Method/Content: On the analysis of the condition assessment of critical premature infants before transit, personal protection points of medical staff, life support of critical premature infants, emotional counseling of families, construction of green channel admission, the factors of the whole process of transit is considered. The implementation plan of nursing work during transit of critical premature infants under COVID-19 is formulated. This plan can improve the quality of transit of critical premature infants obviously.

Results/Outcomes/Findings: This paper has done many discussions on the transit of critical premature infants, and proposed the implementation plan of nursing work during transit of critical premature infants under COVID-19. This research would provide much more guidance for transit nursing work of critical premature infants.

Conclusions/Discussion: The research could effectively guide the transit and treatment of critical premature infants under COVID-19. It could significantly shorten the hospital transit time, prevent and reduce the risk of adverse events during transit, ensure the efficiency and safety of transit, and further improve the family members satisfaction. With the effective communication, the family members would understand the isolation and protection strategies of the prevention and control under COVID-19 psychologically and emotionally. And they would cooperate and trust the treatment and nursing for critical premature infants.

Management strategy of pediatric fever clinic in tertiary general hospitals in post-COVID-19 era

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ABSTRACT

Objective: Children as a special group, how to improve the medical experience of children fever outpatients in general hospitals under the background of normalized epidemic prevention and control.

Methods: Through the implementation of three-level pre-examination triage system, scientific and reasonable medical treatment process; Strictly strengthen training, improve the ability of staff; Protect patients and their families from cross infection. Beautify the treatment area, reduce the resistance of children; To ensure the smooth development of fever clinic, we should provide humanistic care to children and their families.

Results: The process of out-patient treatment was smooth, and the negative psychological emotions of family members were gradually relieved or eliminated after treatment.

Conclusion: During the post-COVID-19 period, a series of management strategies should be implemented to ensure the safety of children, their families and medical staff. Stabilize the mood of children and their families, and improve the medical experience under the epidemic, Reduce cross infection.

Survey of work stress and coping styles of pediatric outpatient and emergency nurses in China

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ABSTRACT

Objective: To explore the current situation and relationship between the stressors and coping styles of nurses in the outpatient and emergency department of pediatric hospitals in China, so as to provide reference for the occupational stress management of pediatric nurses.

Methods: In COVID-19 period, the questionnaire survey of 1457 outpatient and emergency nurses in 29 provincial children's hospitals was conducted by using the "Nurse work stress Scale" compiled by Zhang Jingping et al and the "Simple Coping Style Questionnaire" (SCSQ) compiled by Xie Yaning et al.

Results: The average score of the work stressors of pediatric outpatient and emergency nurses was 8.05±3.79, among which the main stressors were workload, nature of work and nurses' expectations. Pediatric nurses tend to take a proactive approach. The stress level of pediatric nurses at emergency and out-patient departments was positively correlated with negative coping style ($P < 0.01$). Multiple regression analysis showed that staffing, age and coping style were the influencing factors of nurses' expectations. Coping style is the influencing factor of the conflict between work and family. Age, coping style and years of nursing work are factors influencing the nature of work. Establishment, working department and coping style are the influencing factors of patient factors. Organization and negative response patterns are the factors that influence workload.

Conclusion: Pediatric outpatient and emergency nurses are in a state of high stress. The stressors are mainly from workload, nature of work and nurses' job related.

A survey study on work stress of pediatric nurses in maternal and child hospital of tertiary level A in different periods in Wuhan

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ABSTRACT

Background: Nursing stress refers to the various physical and mental load that nurses bear in their daily work, which makes them not adapt subjectively. Studies have shown that high stress leads to a decrease in nurses' subjective well-being and work enthusiasm, which in turn affects the quality of service and the effect of rehabilitation. A new national survey shows that 74.73 percent of nurses think that work is stressful. The greater the work pressure, the lower their mental health level, and even affect their normal life and work. Pediatric nurses are a special group among nurses. Compared with other departments, the noisy environment, incessant crying and crowded space in the pediatric department have resulted in high mental stress among nurses, and even a slight carelessness in the treatment and nursing has led to complaints and disputes, in such a high-pressure environment caused the work of nurses pressure.

Method/Content: An online survey was conducted among all pediatric nurses in Maternal and Child Health Hospital of Hubei Province by using the Chinese nurses Job Stressors Scale, and the results were statistically analyzed.

Results/Outcomes/Findings: In 2019, the pediatric nurses' total work stress was 68.14±24.48. In 2020, during the novel Corona-virus epidemic, the pediatric nurses' total work stress was 52.05±27.38. There was a significant statistical difference between the two groups (P<0.001).

Conclusions/Discussion: The work stress of pediatric nurses in different periods is moderate. Those who have worked for more than 15 years, aged between 30 and 35, and have the title of senior nurse have the greatest pressure. In this study, the reduction of nursing workload, friendly attitudes of patients or their families and the increasing social support can effectively reduce the pediatric nurses' work stress.

Neonatal referral and admission process and sensory control management plan in sealed control area

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ABSTRACT

Background: Coronavirus Disease-19 (COVID-19) is a respiratory infectious disease caused by SARS-CoV-2. Its main clinical manifestations are fever and cough, and some atypical extrapulmonary manifestations. With the prevalence of new corona pneumonia, the virus continues to evolve and mutate, forming multiple mutants. The virus strains with strong infectivity are Omicron and Delta. Studies have shown that the mutant strains have higher resistance to vaccines and neutralizing antibodies. On January 8, 2022, an outbreak of local infection in Omikhon occurred in Tianjin, and most of the infected patients were children (78 cases). In January 2022, there were more than 100 cases of cold chain transmission in Derta in Beijing, and the minimum infection was only five months. Newly mutated viruses pose new challenges to the prevention and treatment of COVID-19. China' s latest prevention policy requires accurate prevention and control of the work and activity areas of positive cases. Three types of prevention and control areas are established, including sealed control area, control area and prevention area. The seal area implements' regional closure, insufficient exit, and service access. Therefore, the purpose of this paper is to establish a transfer and treatment process for newborns in the sealed area to ensure that the treatment of newborns in the sealed control area is unobstructed, efficient and convenient.

Methods: This paper based on the successful referral of a case of neonatal pneumonia in the sealed area, this paper formulates the neonatal referral and admission plan in the sealed area. The plan includes five aspects: evaluation and preparation before referral, specific contents of referral implementation, infection prevention and control during hospitalization, discharge process and suggestions for the admission of children in the sealed area. The purpose is to ensure that children in the sealed area can be treated safely, effectively and quickly for reference.

Results: Successful treatment of a neonatal pneumonia patient in accordance with our transport and treatment process.

Conclusion: It is necessary to establish an information platform for patient referral in sealed control area. Make the Role of Community Doctors fully reflected in Epidemic Prevention and Control 3.Adequate preparation for designated hospital.

Section 4: Nursing Education and Research in Paediatrics

The application effect of Jigsaw teaching method in clinical decision-making training of nursing undergraduates

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ABSTRACT

Background: To explore the effect of Jigsaw teaching method on improving clinical decision-making ability of nursing undergraduates in arterial blood collection under the background of mixed teaching.

Method/Content: 135 nursing undergraduate interns from a medical university of 2018 were randomly divided into two groups. The experimental group (n=66) was taught using Jigsaw teaching method based on the "Super Star Learning Pass" platform. The control group (n=69) was taught with PBL teaching method on the "Super Star Learning Pass" platform. Two groups of students before and after class theory test, training skills assessment, nursing clinical decision consciousness scale and teaching satisfaction survey.

Results/Outcomes/Findings: After teaching, the score of the experimental group (84.70±6.32) was higher than that of the control group (78.87±6.84). The total score and dimension score of clinical decision consciousness in experimental group were higher than those of the control group ($P<0.05$). The overall teaching satisfaction and dimension satisfaction of the experimental group were higher than those of the control group ($P<0.05$).

Conclusions/Discussion: Jigsaw teaching method under the background of mixed teaching is beneficial to stimulate the learning interest of nursing students, improve their academic performance and nursing clinical decision-making ability.

Effect of Beck cognitive therapy on psychological distress of caregivers of childhood malignant tumor

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ABSTRACT

Background: To explore the effect of Beck cognitive therapy on psychological distress of caregivers of childhood malignant tumor.

Method/Content: 116 children caregivers of malignant tumor were randomly selected to receive Beck cognitive therapy, and their psychological pain degree was evaluated before and after intervention, and the scores were compared with those before and after psychological intervention by psychological pain assessment scale.

Results/Outcomes/Findings: The psychological pain of caregivers of childhood malignant tumor was evaluated before and after Beck cognitive therapy, and the scores of psychological pain assessment after the intervention were lower than before, indicating that the psychological pain degree of caregivers of childhood malignant tumor was reduced after Beck cognitive therapy intervention.

Conclusions/Discussion: Beck cognitive therapy can effectively relieve the psychological pain of children caregivers of malignant tumor.

Validity and reliability of Self-car Behavior Assessment Questionnaire for adolescent with systemic lupus erythematosus

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ABSTRACT

Background: Systemic Lupus Erythematosus in adolescents develops faster and more severely than adults. It is a chronic disease that is incurable. But the symptoms of the disease can be controlled under the supervision of a specialized doctor coupled with correct behavior. The researcher wanted to develop an assessment tool for self-care behavior of adolescent with Systemic Lupus Erythematosus.

Method/Content: The sample were adolescent with Systemic Lupus Erythematosus aged between 10-18 years whom receive treatment at Siriraj Hospital, both inpatients and outpatients, 104 persons. Collected data were analyzed using Social statistical package.

Results/Outcomes/Findings: The content of the tool is valid. The questions of the tool are placed orderly and correlated with the definition. The IOC (Item Objective Congruence) coefficients ranged between 0.6 - 1.0 and Cronbach's alpha coefficient is calculated to determine internal consistency reliability of the over all tool (alpha = .73).

Conclusions/Discussion: Questionnaire for self-care behavior of adolescent with systemic lupus erythematosus 45 questions initially tested for validity and reliability are accepted. Can enable health care personnel to assess self-care behavior of adolescent with systemic lupus erythematosus.

Observation on sedative effect of modified chloral hydrate enema on infants

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ABSTRACT

Background: The traditional chloral hydrate enema method was used in the MRI examination of infants in our hospital, which resulted in poor sedation and hypnosis effect, high leakage rate and low satisfaction of family members. Therefore, relevant experiments were conducted to improve the chloral hydrate enema method.

Objective: To investigate the sedative and hypnotic effects of modified chloral hydrate enema on MRI examination of infants.

Method: A total of 120 infants who needed sedation and hypnosis for magnetic resonance examination in pediatric outpatient department of our hospital from January 21 to December 21 were selected and divided into control group and observation group. The control group was given traditional chloral hydrate retention enema. The observation group received the improved chloral hydrate enema method, changed the body position, the depth of intubation, preliminary education, intestinal preparation, and compared the sedative effect after enema between the two groups, and the one-time success rate.

Results: The success rate of the modified chloral hydrate enema was higher than that of the traditional enema.

Conclusions: Through the improvement of chloral hydrate enema, the leakage rate is significantly reduced, the sedation and hypnosis effect is significantly improved, the success rate of examination is improved, and the quality of nursing service is improved.

Organizational silence and associated factors of among paediatric Nurses: a cross-sectional study

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ABSTRACT

Background: Most studies on the organizational silence are confined to the teachers and financial or banking employee, and very few, to the nursing sector especially paediatric nurses. This study aims to assess level of organizational silence among paediatric nurses and analysis the associated factors. The result of this study way be used to inform policy intervention to reduce organizational silence in paediatric nurses.

Aims: The aim of this study was to assess level of organizational silence among pediatric nurses and analysis the associated factors.

Methods: A cross-sectional study was conducted using web-based questionnaire through the Wen juan xing platform with paediatric nurses among Shanghai Children's Hospital in Shanghai, China. Organizational silence was measured using 20-item self-reporting designed Organizational Silence Scale by Yang Jing. Data were collected between August 2020 and December 2020. 700 paediatric nurses in Shanghai, China were surveyed and demographic information and organizational silence assessed (662 of returned surveys analysed). Descriptive statistics (median and interquartile range, IQR) of nurses' overall organizational silence and its subscales are reported. Wilcoxon rank sum test for the continuous parameters which were not normally distributed (tested using Shapiro Wilk test).

Results: The median for all items was 2.15(IQR 1.50-2.90). The Wilcoxon rank-sum test showed significant differences (p value <0.05) in age, Number of years in the nursing profession, professional title, address of household registration, The health status of parents, Living with parents or not, Marital status, education, Number of years in the paediatric nursing profession, Department, having children or not. The multiple linear regression analysis showed the health status of parents (B=0.052, P<0.05), education (B=0.031, P<0.05) and department (B=0.010, P<0.05) strongly predicted organizational silence.

Conclusions/Discussion: The organizational silence level is at a lower-middle level. The associated factors identified allow for more targeted intervention to decrease the organizational silence. It is important to take the care burden, family-work conflicts, education and department into consideration, and to cultivate the communication skills all which can potentially impact the organizational silence.

Enhancing the paediatric setting: nursing students' clinical experiences

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ABSTRACT

Background: The paediatric clinical learning environment is a specialised area of nursing requiring specific knowledge and skills in assessing and treating children, whilst including and supporting their families and a range of wider dynamics. Nursing students' placements in a clinical area build critical thinking, clinical reasoning, paediatric care, and address the learning of skills and knowledge required to be a Registered Nurse. This project aims to better understand how to enhance nursing students' experiences in the paediatric clinical setting and identify the specific needs of nursing students to promote the provision of support to meet those needs.

Method/Content: Interpretive Description explored the experiences of seven nursing students in the paediatric clinical learning environment across the three year levels of an undergraduate nursing degree. Semi-structured, open-ended questions were collected, and the data interpreted by Braun and Clarke's six steps of thematic analysis.

Results/Outcomes/Findings: Five main themes emerged: Paediatric Nursing is a Specialty, Unprepared for Paediatric Clinical Placement, Communication in the Paediatric Setting, Emotional Responses to Nursing Children, and Experiential Learning and Support in Clinical Placement. The implications of the study enhance education and support to nursing students from tertiary and clinical venues and can guide teaching staff towards resources available to students prior, during, and after nursing children.

Conclusions/Discussion: Nursing students found the paediatric setting is a specialised area of nursing requiring specific forms of communication and support to aid in decreasing emotional burden, whilst promoting experiential learning and opportunities. Further research could be aimed at developing resources for nursing students commencing paediatric placement, and staff providing support and education for them.

Effects of three different health education methods on the health literacy and drug compliance of parents of children with Kawasaki disease

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ABSTRACT

Objective: To explore the effects of three different health education methods on the health literacy and drug compliance of parents of children with Kawasaki disease.

Methods: Purpose sampling method was used to divide the parents of 98 children with KD into groups according to their admission time. Among them, there were 32 cases in the control group, 33 cases in the intervention group 1, and 33 cases in the intervention group 2. The control group was given regular health education, the intervention group 1 was given a mind mapping health education, and the intervention group 2 was given a video-based health education. One-way analysis of variance and repeated measures analysis of variance were used to compare the health literacy and drug compliance levels of the parents of the three groups of children with KD when they were admitted, discharged, 1 month after discharge, and 3 months after discharge.

Results: The KD health literacy scores of the parents of the children in the intervention group 2 were higher than those in the control group and intervention group 1 when the children were discharged, 1 month after discharge, and 3 months after discharge. The difference was statistically significant ($P<0.05$). There was a significant interaction effect between parental KD health literacy scores at different time points and groups ($P<0.05$). The drug compliance scores of the parents of the intervention group 1 and the intervention group 2 were higher than those of the control group at 3 months after the children were discharged from the hospital, the difference was statistically significant ($P<0.05$), There was a significant interaction effect between parental drug compliance scores at different time points and groups ($P<0.05$).

Conclusions: video-based health education can improve the KD health literacy level of children's parents. Mind mapping and video-based health education can both improve the drug compliance level of them.

A cross-sectional study of shared decision-making knowledge, attitudes, and troubles among pediatric hematologists and nurses in China

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ABSTRACT

Background: With the progress of treatment modes, the survival rate of children with childhood hematological diseases have been rising in recent years. The decision needs of parents are drawing more and more attention. Shared Decision Making (SDM) is a new medical decision model that is being discussed in recent years. However, there are still many problems and influencing factors in the practice of SDM in China.

Method/Content: We conducted a cross-sectional survey among pediatric hematologist and nurses in south China from January to April 2021. The medical staffs completed the self-designed Knowledge, Attitudes and dilemma survey regarding SDM among medical staff in pediatric hematologic tumor specialty questionnaire. Mann-Whitney U test and Kruskal-Wallis H test was used to find differences knowledge level based on their demographics and work characteristics.

Results/Outcomes/Findings: A total of 308 medical staffs completed the questionnaire (143 of doctors and 165 of nurses). Mean of age was 31.42 ± 7.317 (21–55 years) and 89.3% (n=275) were female. The median knowledge score was 12 (out of 20) and only 12.0% displayed at good level. The score was significantly correlated with whether know SDM (Z=2.330, p=0.02), profession (Z=13.237, p=0.01) and degree of education (H=12.880, p=0.005). 85.4% had a positive attitude toward implementing SDM and the most reported barrier is that the patient decision agent did not have the necessary medical expertise to make decisions (62.7%).

Conclusions/Discussion: Although pediatric hematologist and nurses in south China have positive attitudes towards SDM, suboptimal level of knowledge and lacking supporting tools bring some problems with the application of SDM in clinical practice. Therefore, based on the traditional Chinese cultural background, how to improving knowledge of SDM and the ability to translate SDM knowledge into routine clinical practice of pediatric hematology-oncology medical and nursing staff through training need to be explored gradually in the future.

Application effect of live classroom based on Addie model in pain management training of neonatal nurses

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ABSTRACT

Objective: To explore the application effect of live classroom based on Addie model in pain management training of neonatal nurses.

Methods: according to the five stages of Addie teaching model, with the help of the third-party online live broadcasting platform, 65 neonatal nurses in our hospital were selected by convenient sampling method to carry out pain management training. The neonatal nurses' pain knowledge and attitude were investigated before and after the training, and the teaching effect was evaluated after the training.

Results: The scores of pain knowledge and attitude of neonatal nurses after online live classroom training based on Addie model were higher than those before training (P<0.05). 95.64% of nurses were satisfied with the classroom design and management of this course, and 92.07% Of nurses believed that it had a positive impact on the practice of pain management at work.

Conclusions: the webcast classroom based on Addie model can effectively improve the level of pain knowledge and attitude of nurses, and nurses have high recognition of the training.

A virtual reality system of first aid training for children with pulmonary aspiration

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ABSTRACT

Background: Pulmonary aspiration, the inhalation of foreign material into the lower airway, has been a significant cause of morbidity and mortality, which can be an acute event or a chronic recurrent syndrome in children. It is necessary for nurses and parents to learn the first-aid knowledge and skills of pulmonary aspiration so that they can help the children with pulmonary aspiration. Virtual reality (VR) technology may meet their learning needs. Therefore, our team developed a VR system for first aid training of pulmonary aspiration.

Objective: The purpose of this study is to introduce the development process of the VR system of first aid training for children with pulmonary aspiration.

Method: We formed a multidisciplinary research team that included academic researchers, software engineers, and nurses. Academic researchers have extensive expertise in VR systems and pulmonary aspiration.

Results: After several rounds of discussion and modification, A first-aid teaching system for children with pulmonary aspiration based on VR technology was developed. The system mainly consists of three modules (medical encyclopedia, simulation exercise, and examination). The three basic functions of the system are described below. 1) training function, which mainly includes knowledge popularization, intelligence enhancement, and strain training. 2) Scenario simulation, which means to immerse learners in the model of case introduction, to achieve a better teaching effect. 3) Feedback function, which refers to the feedback of learning effect through the examination.

Conclusions: The VR immersive training system visualizes the aspiration process and generates a real-time dynamic three-dimensional realistic scene, which is conducive to enhancing the learning effect. The system will help parents and nurses to master the knowledge and skills of first-aid on pulmonary aspiration.

Construction of a risk prediction model for catheter-related deep vein thrombosis in critically ill children

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ABSTRACT

Objective: To construct a predictive model to assess the risk of catheter-related deep vein thrombosis in critically ill children, and the predictive ability of the model was tested in order to provide technical support for screening critically ill children with high risk of catheter related deep vein thrombosis.

Methods: The clinical data was collected of children who underwent center venous catheter in pediatric intensive care unit of a third-grade hospital in Jilin province from January 2018 to December 2020, according to wether the occurrence of catheter-related deep venous thrombosis, it was divided into DVT group and non DVT group, and the predictive factors of the two groups were compared and the risk prediction model was established. The goodness of fit of the model was verified by Hosmer-Lemeshow test. The predictive validity of the model was evaluated by the area under the ROC curve.

Results: Univariate and multivariate analysis showed that age, unequal leg circumference and blood purification treatment were the predictors, but critical illness score was a protective factor of catheter related deep vein thrombosis in critically ill children. Logit(P)= 0.004-0.580 × pediatric critical illness score + 1.167 × whether the circumference of both legs is equal + 0.083 × Age + 0.729 × wether underwent blood purification treatment. H-L test P=0.574, the area under the ROC curve of development group was0.698, while the best cut-off value was 0.579, with sensitivity as 58.3%and specificity as 73.6%, indicating the fit and predictive validity of the model were good. The area under the curve in the validation group was 0.719 (95% CI 0.622, 0.817), the sensitivity as 59.1% and specificity as 76.2%.

Conclusion: The risk prediction model of catheter-related deep vein thrombosis in critically ill children has good prediction ability, When applied in combination with clinical practice, it can provide reference for medical staff to take preventive management measures in time.

Section 5: Quality and Safety in Paediatrics

Case management based on PDCA cycles continues to improve the quality of pediatric care

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ABSTRACT

Objective: To carry out PDCA case management and to continuously improve the quality of pediatric care.

Methods: In 2021, five nursing units in our department analyzed the most prominent problems in nursing quality in 2020, according to the current situation investigation, draw fish bone map, combine the main influencing factors, draw pareto map, confirm because, use brainstorming, formulate countermeasures and expected goals through 5W1H, and make work plan, plan implementation, check implementation effect in quality management activities, unsuccessful into the next cycle. And complete the quality control of all quality projects quarterly, and do a good job in quarterly, half-annual and annual quality analysis.

Results: The use of PDCA in each nursing unit effectively improved the implementation quality of outstanding nursing events in the department, and the quality assessment of the nursing department was excellent at the end of the year.

Conclusion: The working method of PDCA case management is a basic and effective method of quality management. To continuously supervises the implementation of its effective measures can identify and solve new triggers in time, continuously improve the quality of pediatric nursing and ensure nursing safety.

Improve the qualified rate of 24-hour urine sample collection through PDCA cycle

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ABSTRACT

Background: The detection of 24-hour urinary biochemical indexes is a very important examination for children with renal diseases. It has important value for evaluating renal function. However, due to the lower cooperation degree of children, cumbersome collection process, shift handover and other reasons, the qualified rate of samples is low. Even the parents of the children refused the examination, which seriously affected the clinical diagnosis and treatment.

Method: Establish a nursing quality improvement project team. 198 children who needed to collect 24-hour urine samples from June to December 2019 were selected as the control group. Carry out current situation investigation and problem analysis according to the collection of 24-hour urine samples; (2) Set appropriate objectives and formulate rectification measures; (3) Confirm the rectification effect after PDCA cycle activities. 172 children who needed to collect 24-hour urine samples from April to September 2020 were selected as the experimental group. The qualified rate of 24-hour urine samples was compared between the two groups.

Results: The qualified rate of 24-hour urine sample collection in the control group was 80.3%, which was significantly lower than 96.5% in the experimental group. The difference was statistically significant ($P < 0.05$).

Conclusions: Through PDCA activities, the qualified rate of 24-hour urine samples of children was significantly improved, and the quality of nursing was continuously improved. It provides accurate basis for clinical diagnosis and treatment, and the satisfaction of children's families and doctors has also been improved.

Evaluation of the nursing quality control effect of the first-level quality control mode with full staff rotation in neonatal department

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ABSTRACT

Background: Level 1 quality control is the forefront of nursing quality management. Traditional model has the disadvantages of poor effect, compliance and sustainability. The new model implemented through mutual control and self-control, can make everyone accurately grasp the quality standards, so that the quality management in the best state of high self-discipline. Since November 2021, our department has applied this model and achieved satisfactory results.

Objective: To observe the effect of the new first-level quality control mode.

Methods: Conventional mode was adopted from August to October 2021.The improved mode was adopted from November 2021 to January 2022, including: 1. Setting up Quality control posts, in which all staff participate and compete for employment and take turns monthly. Those with outstanding quality control achievements can be reappointed. All nurses are divided into 6 teams, and one team assists to carry out the quality work every month. 2.Quality engineer was responsible for all quality control during the month, including routine and key special quality control, innovation project of quality control, etc. 3. using Incentive mechanism to manage quality control posts, assessing their work with the results of secondary and tertiary quality control and the incidence of adverse events, giving incentives with scheduling and performance. The compliance rate of 12 nursing quality standards, the satisfaction of inpatients and the incidence of nursing defects were statistically analyzed before and after the implementation of the model.

Results: After the implementation of the new model, the standard compliance rate of basic nursing, disinfection and isolation, instrument management, standardized management, and the incidence of nursing defects were improved, the differences were statistically significant (X^2 = 7.22,5.17,7.98,8.97, 4.19; all the P < 0. 05), there was also a statistically significant difference in the satisfaction of inpatients before and after implementation (t= 4.85, P <0. 05).

Conclusion: The improved model can effectively improve the quality of neonatal nursing.

Application of SBAR communication mode in communication between pediatric cardiovascular surgery doctors and nurses

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ABSTRACT

Background: The standardized structure of the SBAR tool reduces the omission of important information and can be used in various situations. In health care, the Joint Commission and the Institute for Health Care Improvement have recommended the use of the SBAR tool to improve communication and reduce medical errors.

Method: Thirty-four nurses from two wards of pediatric cardiovascular surgery in a tertiary hospital in Hunan Province from June 2019 to July 2020 were selected as the experimental group and the control group. The control group communicated with doctors according to their own habits, and the experimental group implemented SBAR communication. The model compares the changes of the two groups of nurses in the communication ability between the doctors and nurses, the doctor's satisfaction with the nurses, and the doctor's initial judgment time.

Results: The scores of nurses' communication skills in the experimental group were higher than those of the control group ($P<0.05$); the doctors' scores of nursing job satisfaction were higher than those of the control group ($P<0.05$); the time for the doctors to make preliminary judgments was lower than the control group ($P<0.05$).

Conclusions: The SBAR communication model improves the communication skills between doctors and nurses, improves doctors' satisfaction with nursing work, reduces the time for doctors to make preliminary judgments, and provides a guarantee for patient safety management. It is clinically worthy of promotion and application.

Effect of comprehensive nursing based on pathogen distribution on reducing the risk of infection in pediatric intensive care unit

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ABSTRACT

Background: Children in the Pediatric Intensive Care Unit have more severe underlying diseases. The immune system of the body is less resistant to bacterial invasion after being affected by the disease. This is the most important factor in the occurrence of infection. It is of great significance to reduce the risk of infection in children through nursing methods. To a certain extent, it can reduce the drug resistance of children's bodies and play a longer-term prognostic effect.

Objectives: To explore the effect of comprehensive nursing according to the distribution of pathogenic bacteria in children with infection in pediatric intensive care unit.

Method: The study site was selected from the pediatric intensive care unit of a 3A hospital. 1401 critically ill children admitted in 2018 were selected as the control group and received comprehensive nursing. Their secretions were cultured and the distribution of pathogenic bacteria was analyzed. 1299 critically ill children admitted in 2019 were selected as the observation group, and comprehensive nursing based on pathogen distribution was implemented. The infection and clinical indexes of the two groups were compared.

Results: The infection rate of the study group was lower than that of the control group (X^2=20.937, P<0.001), The proportion of children infected with Staphylococcus aureus, Escherichia coli, Streptococcus pneumoniae and Staphylococcus epidermidis was lower than that of the control group(X^2=5.775, 4.777, 4.234, 4.721, P<0.05), and the proportion of infected children in different infection types, different age groups and different seasons was lower than that of the control group (P<0.05); Compared with the control group, the length of stay in ICU, hospitalization time and rescue times of the study group were lower (t=7.633, 15.840, 13.054, P<0.05), the anxiety score of children's family members was lower (t=10.522, P<0.05), and the nursing satisfaction score was higher (t=-13.079, P<0.05).

Conclusion: According to the distribution of pathogenic bacteria in pediatric intensive care unit, the implementation of comprehensive nursing intervention can effectively reduce the risk of infection in the follow-up pediatric intensive care unit and shorten the treatment time.

Management and effect of improving compliance of wrist band in pediatric patients

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ABSTRACT

Background: To explore the compliance management of wrist band wearing in pediatric ward, so as to implement the identification system of wrist band effectively.

Method: Methods from September to December 2020 (after strengthening management), strengthen publicity and education, standardize wearing, ensure comfortable wearing, strengthen supervision and management, strengthen medical personnel to check the compliance of wrist strap, and compare the reasons affecting children's wrist strap wearing from May to August 2020 (before strengthening management) and September to December 2020 (after strengthening management) and the effect evaluation of wrist strap wearing enhancement.

Results: After 3 months' management, the wrist band wearing rate of pediatric inpatients was improved obviously compared with before management.

Conclusion: Strengthen the management of children wearing wrist strap, improve the compliance of children wearing wrist strap, reduce the incidence of causes affecting children's compliance, improve the accuracy of medical staff's identification of children, and reduce the occurrence of nursing errors.

Summary of the best evidence for subcutaneous heparin injection in children

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ABSTRACT

Background: Low molecular weight heparin (LMWH) is used extensively as anticoagulants and may be administered by subcutaneous, but leads to adverse outcomes such as bruising, haematoma and pain at the injection site.

Objective: As to decrease the adverse outcomes, we retrieved, evaluated and synthesized evidence related to the subcutaneous injection technique of LMWH at pediatric ward.

Method: Clinical decisions, recommended practices, evidence summaries, clinical practice guidelines, technical reports, expert consensus, Systematic review were searcher at the website of BMJ Best Clinical Practice, Up-to-date Clinical Consultant, JBI Library, Cochrane Library and others for extracting and summarizing evidence. The methodological quality assessment of literature was also conducted.

Results: According to the inclusion criteria, 9 evidence literature were included, including 2 evidence summary, 2 expert consensus, and 5 systematic reviews. 17 evidence of injection site, injection speed, injection angle, and post-injection treatment were summarized after reading, extracting and classifying.

Conclusions: Medical staff and caregivers should follow the best evidence when administration subcutaneous heparin, standardize the administration skill as to reduce the incidence of adverse outcomes.

Construction of SIPOC first-aid model for convulsions

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ABSTRACT

Background: Convulsion is one of the common clinical symptoms in pediatric neurology department. The construction of SIPOC first aid model, the use of scientific quality management methods, efficient implementation of convulsive first aid.

Method: According to the SIPOC model before improvement, conduct practical exercises and record the time points, draw the value flow chart before improvement, find the weak points according to the time axis, organize group discussion, formulate corrective measures, build the SIPOC model after improvement, and compare the results before and after practical exercises.

Results: After the improvement, the first aid time is greatly reduced, the satisfaction of family members is improved, and the workload of nurses is reduced.

Conclusions: The construction of SIPOC first-aid model provides a better method for clinical rescue and nursing of children with sudden convulsions, so that the condition of such children can be effectively controlled in the shortest time without endangering their lives.

Awareness and knowledge of medical statistics and need for medical statistics consultation service among health professionals: a cross-sectional study

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ABSTRACT

Background: Medical statistics is very important knowledge for health professionals to do scientific research, but also quite difficult to fully understand, so medical statistic consultation service might be a good way to solve statistic questions.

Objectives: To explore the awareness and knowledge of medical statistics and the need for statistics consultation among health professionals.

Method: Questionnaire was developed through literature review and group discussion, then modified by expert consultation, user interview and pre-experiment. The final questionnaire was distributed to medical related workers in different professions through online survey platform form 1 to 31, December 2021.

Results: A total of 508 health professionals responded to the survey, 502 of the respondents finished the questionnaire. Respondents came from 23 provinces, among which nurses and doctors counted for 57.17% and 22.71%. Respondents with doctor degree, master degree and bachelor degree counted for 6.97%, 32.47% and 51.2%, respectively. 76.49% of the respondents had learned medical statistics in college, but 49.80% of the respondents did not receive any relative training per year after college. 4.98%, 4.78%, 5.18% and 22.51% of the respondents could always independently deal with statistics question for study design, statistical analysis, sample size calculation and reviewer statistical questions. 61.75% respondents had used statistical software. 93.63% of respondents taken medical statistics as important, but 92.63% thought medical statistics was difficult to learn, 90.64% willing to take medical statistics consultation service, and 81.32% would like to consult from professional statisticians at university or hospital. Study design consultation counted for the largest demand with 91.21%, 57.44% consultation service needed three or more meetings to communicate. The main factors affecting the quality of the consultation were poor basic knowledge, lacking of detailed study information, and the statisticians' knowledge on the overall design and research background.

Conclusion: Health professionals fully realize the importance of medical statistics, but the ability to apply appropriate statistical methods in research is generally low. Statistics consulting services are in huge demand, but the quality of communication needs to be improved.

Evaluation of the use and management of continuous glucose monitoring among administrators and operators in 28 provinces in China: a cross-sectional study

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ABSTRACT

Background: Lack of reports of the status of CGM use and management in Chinese hospitals.
Objective: To investigate current use and management of continuous glucose monitoring (CGM) at the hospital level in China.

Method: We conducted an online survey between October and December 2021.A convenience sample of 84 managers and 281 nursing staff responsible for CGM operations was selected. The use and management CGM was assessed by a questionnaire that contains 15 items. Each question had three answer options and scored as 2 (yes),1 (not sure), and 0 (no). The link was sent to the Diabetes Group of the Paediatric Nursing Alliance of the China Children's Medical Centre, the 27th Chinese Nursing Association's Expert Pool on Intravenous Therapy, and the Nursing Management Group of the China Children's Hospital Branch through WeChat.

Results: Among 84 hospitals, the prevalence of real-time CGM, retrospective CGM, and other types of CGM use was 63.1%, 34.5%, and 2.4%, respectively. Fifty-eight (69.0%) hospitals used CGM for no more than 10 patients per month, and 79 (94.0%) hospitals' CGM was managed by either internal medicine department or endocrinology department. Seventy-four (88.1%) hospitals had CGM standard operating procedures, but only 29 (34.5%) hospitals had CGM-related emergency plans. Maternal and child hospitals were more likely to have a dedicated person to install CGM than general hospitals. Seventy-one (84.5%) managers perceived that the use and management of CGM were inadequate. Less than 60% of the managers reported that their hospitals had regular assessment of CGM use or the use of CGM was reasonable. In total, 69% of the hospitals had less than 10 patients using CGM per month. Age of CGM operators, hospital type, monthly number of patients using CGM, and frequency of CGM training were associated with the management level of CGM ($P<0.05$).

Conclusions: The use and management quality of CGM in Chinese hospitals were low. Trainings and interventions are needed to improve the quality of care for people with diabetes.

Analysis of nursing quality control in epidemic period in novel coronavirus

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ABSTRACT

Background: At the end of 2019, a new type of coronavirus pneumonia broke out all over the world. The disease was extremely contagious, and the patients showed persistent high fever, dyspepsia and other diseases, but there was no very effective control method at the initial stage of the outbreak. It has caused great pressure on major medical institutions and social industries, and also brought great danger to the lives and safety of the people. After the outbreak of the epidemic, our hospital responded positively to the requirements of the national and provincial and municipal health departments at all levels. Combining with our own characteristics, we took positive and effective preventive measures to strengthen the control of nursing quality, so as to effectively prevent the occurrence of infection in the hospital, and ensure the safe and normal operation of all departments. The specific nursing quality control management methods are analyzed and summarized.

Objective: To explore the nursing quality control methods during the epidemic period in novel coronavirus.

Methods: According to the local epidemic characteristics and the relevant requirements of various departments, the nursing quality control methods were re-established and improved based on the original nursing quality control mode in our hospital, and the nursing quality in each ward was strictly controlled.

Results: By strengthening the nursing quality control, from the end of 2019 to the beginning of 2021, the problems found during self-examination in our hospital gradually decreased, and the nursing quality score continued to rise, and there was no case of novel coronavirus infection among doctors and patients.

Conclusion: In the epidemic period of novel coronavirus, adopting the management method of strengthening nursing quality control and strictly implementing every detail can effectively prevent nosocomial infection and ensure the safe and orderly progress of clinical nursing work, which is worth popularizing and applying.

Section 6: Nurse Informatics and Innovation in Health

Efficacy of a smartphone-based care support program on improving post-traumatic stress in families with childhood cancer in China: protocol of a random controlled trial

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ABSTRACT

Background: Diagnosis and treatment represent distressing periods in the experiences of families of children with cancer. A higher risk of psychosocial challenges exists in pediatric cancer families in China because of limited health services and resources for psychosocial oncology care. Effective interventions tailored to the knowledge level and cultural values of this population in China are needed. Therefore, the overall goal is to evaluate a smartphone-based care support (SBCS) program for the families of children with cancer in China.

Method: A total of 216 families of children with cancer will be recruited. And the inclusion criteria are as follow: (1) having a child with a diagnosis of cancer and aged 7-12; (2) the child with cancer has completed primary treatment; (3) the children and their primary caregivers can read and speak Mandarin Chinese and can complete a basic cognitive skill test; (4) children and their caregivers are willing to participate in the study. All intervention procedures and data collection in this study will be conducted through Wechat, but participants will be recruited in Hunan Province, which is a representative province of central south China in terms of geography, climate, culture, demographics, economy, health policy, and lifestyle. The intervention group will receive a SBCS program, which consists of introduction session and four main sessions, and will be conducted sequentially on a single weekend day. Participants in control group will receive standard of care.

Results: The primary outcome is post-traumatic stress of children and their primary caregivers. The secondary outcomes include quality of life, social support, caregiving self-efficacy, which will be collected at baseline, immediately, and 2 and 6 months after intervention.

Conclusions: If SBCS is feasible, acceptable, and effective in improving caregivers' and children's health outcomes, then it can sustainably improve the quality of psychosocial care offered to families of children with cancer in China.

Application of multidisciplinary joint medical care integration training in PICU nosocomial infection training

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ABSTRACT

Objective: To explore the application effect of the integrated model of joint care and multidisciplinary collaboration (MDT) in nosocomial infection training in pediatric intensive care unit (PICU).

Method: A study was conducted on the medical staff in PICU of our hospital. 16 doctors and 26 nurses were selected as the research objects, and 42 medical staff were divided into groups A and B by drawing lots, with 21 in each group. Nosocomial infection training was conducted for all medical staff from June 2019 to December 2019, in which group A carried out regular training mode, and group B adopted MDT combined medical care integrated training mode to compare the application effects of the two training modes.

Results: There was no significant difference between group A and group B in the scores of various assessment contents before training (P>0.05). However, the performance of group B after training was significantly higher than that of group A after training, with A significant difference (P<0.05). The compliance compliance rate of group B was 95.24% after training, which was significantly higher than that of group A (76.19%), and the difference was significant (P<0.05).

Conclusions: Combination of MDT in PICU hospital infection training and medical integration mode, help to deepen understanding of the knowledge of hospital infection among health care workers, strengthen the consciousness of prevention and control of medical staff and effectively restrain the training after the end of treatment and nursing behavior, in order to reduce hospital infection, and promote the rehabilitation in children with foundation, clinical effect is remarkable.

The application effect of intelligent nursing program system based on NNN classification system in clinical nursing work: a mixed method

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ABSTRACT

Background: As a part of hospital information construction, nursing information construction is very important to improve nursing efficiency and quality and ensure the safety of patients. However, we know little about nurses' experience of using nursing information system.

Method: A cross-sectional survey design was employed to collect quantitative and qualitative data. Quantitative Methods: The quantitative study included two parts: one is to record the time that same nurse using the same computer to input and evaluate the admission information of new patients compare with the time of old system and nursing planning system; another is to select nurses to evaluate the quality of electronic nursing documents. Qualitative Methods: The qualitative data which performed as in-depth, semistructured interviews were conducted with a stratified sample of nurses who have used both the old and the new nursing information system.

Results: 1. The average score of each department from January to June 2019 was 93.64 ± 15.32 points, and the average score from January to June 2020 was 99.26 ± 7.68 points. Through paired t-test, the difference between the two was statistically significant ($P < 0.05$). 2. The average time of inputting new patient information using the on-site system was 3.35 ± 0.08 minutes, and the average time of inputting new patient information using the nursing information system was 1.56 ± 0.065 minutes. The time of inputting new patient information decreased by 1.79 minutes ($P < 0.05$) 3.Three main themes emerged from the data: 1) comprehensive, which means the new system provide a more comprehensive view from patient;2) waste time, which included computer file input; 3) dependence.

Conclusions: This qualitative study provide further insight to the real situation of nurses' use of information system. Nurses can make use of the advantages of the existing nursing information system to adjust the clinical nursing work, and provide some suggestions for the nursing information system to be reasonably applied in clinical practice.

Reliability and validation Study of the "Internet + Nursing Service" quality evaluation scale

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ABSTRACT

Background: The implementation of "Internet + Nursing Service" is an innovation of nursing work mode, which increases the accessibility of nursing services and meets the diversified and multi-level service needs of patients. The "Internet + Nursing Service" quality evaluation scale constructed by our research team are based on three-dimensional quality theory and SERVQUAL service quality evaluation model, which provides an evaluation tool to guide the standardized implementation and continuous quality improvement of "Internet + Nursing Service", but its reliability and validity need to be verified. Objective: The purpose of this study is to verify the reliability and validity of the "Internet + Nursing Service" quality evaluation scale in order to provide a reliable and valid evaluation tool for evaluating service quality.

Method: Five experts were consulted to determine the scale's content validity. A web-based questionnaire was used to survey 290 nurses practicing "Internet + Nursing Service", and the scale was analyzed for item analysis, reliability, and structural validity, and the scale was adjusted according to the structural validity results.

Results: The quality evaluation scale of "Internet + Nursing Service" has 4 dimensions, namely, reliable qualification, professional process, excellent result, and risk avoidance, and contains 56 entries, with Cronbach's α coefficient of 0.993, half reliability of 0.954, content validity index of 0.929, and exploratory Factor analysis extracted 4 common factors with a cumulative variance contribution rate of 83.2%.

Conclusions: The "Internet + Nursing Service" quality evaluation scale has good reliability and validity, and the 56 items cover all the contents of "Internet + Nursing Service", which clearly define the core and key of "Internet + Nursing Service" quality evaluation, with practicality, relevance and systematization, and high practical value, providing objective guarantee for further steady and standardized promotion of "Internet + Nursing Service".

Latent profile analysis of job withdrawal behavior in pediatrics nurses

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ABSTRACT

Backgrounds: Nurses, in the current social, as medical workers working in the front line of medicine for a long time. Excepting the high-intensity work, nurses often face various occupational pressures, such as complex working environment, tense nurse-patient relationship and various public health emergencies, which are easy to lead to the decline of nurses' physical and mental health, the level of coping, even finally lead to individual withdrawal behavior.

Objective: To explore the pattern of nurses' job withdrawal behavior and the demographic characteristics among different models.

Methods: Totally 533 nurses were selected with Job Withdrawal Behavior scale (JWB). Latent profile analysis was used to analysis characteristics of nurses' job withdrawal behavior. Logistic regression analysis was used to analyze the relationship between the types of job withdrawal behavior and the demographic variables.

Results: The latent profile analysis showed that 4 latent classes were supported, low-type (49.0%), middle-type (10.5%), high-type (3.2%) and psychological-type (37.3%). Logistic regression analysis found, job withdrawal behavior of nurses were influenced by age, monthly income, job title and frequency of night shift ($P<0.05$).

Conclusions: The job withdrawal behavior of nurses can be classified into 4 types. Age, monthly income, job title and frequency of night shift are helpful to predict the category group of nurses.