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There are missing abstracts in the original published paper. The below abstracts should be included in this published paper. The publisher regrets this error.

eP452

PALLIATIVE CARE AND POINT OF CARE ULTRASOUND (POCUS) IN THE COMMUNITY SETTING

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Introduction

Palliative care clinicians have always cared for patients with life-limiting illnesses in a holistic way and supported patients' wishes. Evidence indicated that this population would like to stay home however many spend their precious time in emergency rooms in order to pursue investigations/interventions necessary for symptom management. Recent advances in technology and development of portable ,affordable ultrasound machines has enabled many clinicians to provide Point of Care Ultrasound (PoCUS) at bedside therefore Canadian palliative care community has been enthusiastic about learning and applying this skill and technology.

Methods

We have conducted an observational quality assurance study of the use of PoCUS in palliative Care Community Setting

Results

We have used PoCUS to assess dyspnea, pain, and abdominal distension experienced by patients with life-limiting illnesses , diminished function and at the end of life. PoCUS was provided in their residences and at their bedsides. We trialed two different portable ultrasound machines to assess these symptoms .We have tracked the outcomes of provision of PoCUS and its impact on patients' care ,and end of life decisions .

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Conclusions

We intend to review the current evidence regarding utilization of Point of Care Ultrasound in the palliative care practice . We will provide the results of our PoCUS pilot quality assurance imitative in the community setting. This will include the benefits, and the challenges of using PoCUS in the community . It will also portray the impact that this practice had on the patients' life and their decisions regarding further medical management and disposition.

eP453

UTILIZATION AND TIMING OF ADVANCE STATEMENTS ON LIFE-SUSTAINING TREATMENT DECISIONS IN PATIENTS WITH RECURRENT GYNECOLOGIC CANCER

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Introduction

A new legislation on Life-sustaining Treatment Decision (LSTD) has been enforced in Korea. This study is to investigate the incidence and timing of LSTD registration among recurrent gynecologic cancer patients.

Methods

Retrospective observational study was performed of recurrent gynecologic cancer patients at a tertiary hospital from February 2018 to January 2019. Patients who signed the LSTD form were analyzed for the type of LSTD, previous number of treatments, time from last treatment to EOL care decision and decision to death.

Results

Among 1,162 patients admitted during the study period, 309 patients had recurrent disease. Among them, 52 patients (14.2%) made EOL care decisions by themselves (n=44) or by the family (n=7). Except 2 patients that have completed the advance directives, only 7 out of 50 patients (14.0%) stated previous knowledge of the new LSTD Act. The majority (92.2%) of patients were in disease progression state, and the median number of chemotherapy regimen was 4 (range 1-9). Among those who have stopped treatment, the median time from the last palliative treatment to LSTD was 42 days (range 7-468). Time from LSTD registration to death was median 10 days (range 0-232). EOL decisions that were made within 3 days of death occurred in 10 patients (19.2%) and most (n=8) of them were surrogate decision-making by the family.

Conclusions

The median time from LSTD to death was 10 days and completion rate of advance directives was low. These findings suggest that early patient-

family-doctor discussions on LSTD is needed to help patients make advance EOL care decisions.

eP454

TRANSLATION AND VALIDATION OF THE KOREAN VERSION OF THE PATIENT DIGNITY INVENTORY IN PATIENTS WITH ADVANCED CANCER: A PILOT STUDY

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Introduction

The Patient Dignity Inventory (PDI) was designed in 2008 to measure different sources of distress related to dignity at the end of life, and has been used to measure the effectiveness and feasibility of Dignity Therapy. The aim of this study was to provide a Korean translation of the PDI and analyze its psychometric properties in patients with advanced cancer.

Methods

The procedure of translation and cultural adaptation was carried out following the Report of the ISPOR Task Force for Translation and Cultural Adaptation. Patients seen in the palliative care clinic between 20th Dec 2018 and 1st Feb 2019, meeting inclusion criteria, were invited to participate in the study. Inclusion criteria were patients with advanced cancer with illness progression or limited prognosis, older than 19 years, normal cognitive function based on clinical consensus, and able to understand Korean. The study protocol was approved by National Cancer Center Institutional Review Board.

Results

Table 1. Patient Sociodemographic Profile and Clinical Characteristics (N = 18)

Characteristics	N (%)
Age in yrs. median (range)	68 (50-91)
Sex	
Female	6 (33.3)
Male	12 (66.7)
Educational level	
Elementary school	2 (11.8)
High school	6 (33.3)
University or more	8 (47.1)
Unknown	1 (5.9)
Cancer type	
Gastrointestinal	11 (61.1)
Gynecologic	3 (16.7)
Lung	2 (11.1)
Prostate	1 (5.6)
Other solid tumors	1 (5.6)
Location of care	
Inpatient	7 (38.9)
Outpatient	11 (61.1)
ECOG	
1	1 (5.6)
2	5 (27.8)
3	12 (66.7)
4	1 (5.6)

Table 2. Internal Consistency Analysis of the Korean Version of the Patient Dignity Inventory (N=18)

Dimension	n of items	ICC (min-max)	IDV (min-max)	IDV (%)	Cronbach's α
Symptom Distress (6-30)	6	0.472-0.862	0.273-0.704	87.5%	0.879
Existential Distress (6-30)	6	0.539-0.851	0.242-0.725	79.2%	0.850
Dependency (3-18)	3	0.372-0.758	0.044-0.712	66.7%	0.701
Peace of Mind (3-18)	3	0.663-0.742	0.296-0.82	83.3%	0.840
Social Support (3-18)	3	0.409-0.737	0.265-0.665	66.7%	0.708
Total question (21-105)	21				0.936
Total question (25-125)	25				0.950

ICC: item internal consistency, IDV: item discriminant validity

Table 3. Concurrent Validity Between PDI-K, ESAS, HADS, and FACIT-Sp-12 (N=18)

	ESAS-r	HADS		FACIT-Sp-12		
	total score	Anxiety	Depression	Meaning	Peace	Faith
Symptom Distress (0-30)	0.541	0.699	0.660	-0.593	-0.456	-0.065
Existential Distress (0-30)	0.437	0.661	0.430	-0.368	-0.054	0.111
Dependency (0-18)	0.433	0.639	0.152	-0.279	-0.250	-0.123
Peace of Mind (0-18)	0.077	0.376	0.402	-0.345	-0.023	0.241
Social Support (0-18)	0.074	0.439	0.517	-0.606	-0.276	-0.137
Total question (0-105)	0.448	0.730	0.490	-0.534	-0.285	-0.021
Total question (0-125)	0.448	0.738	0.496	-0.529	-0.282	-0.023

Spearman correlation coefficient with PDI dimension score.

Edmonton Symptom Assessment System-revised (ESAS-r), the Hospital Anxiety and Depression Scale (HADS), Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being (FACIT-Sp-12).

Conclusions

This study has provided the first Korean version of the PDI, following a rigorous translation method to ensure that PDI terms identify sources of patient distress properly in a Korean context. One of the limitations is that almost half of the patients had been diagnosed with gastrointestinal tumors, so results may not fully generalize to patients with other type of tumors. And Exploratory factor analysis was not performed due to small sample size in this pilot study. A study sample of 140 patients was estimated to be required to perform exploratory factor analysis.

eP455

MODEL FOR INTEGRATED SUPPORTIVE CARE IN GYNAECOLOGICAL MALIGNANCIES IN RURAL POPULATION OF DEVELOPING COUNTRIES

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Introduction

Cervical cancers and ovarian cancers are among most common malignancies in females in South East Asia. Lack of healthcare resources in

remote rural population leads to late presentation and delayed diagnosis. Thus most patients present in advanced stage of cancer

Methods

This study is a review of need of integrated supportive care in gynaecological malignancies.

Results

Supportive care needs in these patients are often unmet. Addressing symptom management and early integration of palliative care leads to improved quality of life. Most common presenting symptoms are abdominal pain, foul smelling vaginal discharge and dyspareunia. Routine symptom assessment is the key to good symptom management. A standardized screening tool can help identify patients with high symptom burden. Supportive care has been shown to improve quality of life, mood, symptom control, satisfaction, survival duration, and caregiver satisfaction, depression, and stress burden. Provision of palliative care is not universal and management of symptoms both physical and psychological has been found to be suboptimal in most of settings

Conclusions

Community based model of Palliative care has been successfully observed in Kerala State. Palliative care training and sensitization of Accredited Social Health Activist (ASHA) can be a integrative link between health care provider and patients

eP456

1-2-3 PROJECT: NURSE DRIVEN INITIATIVE TO NORMALIZE AND SYSTEMIZE PALLIATIVE CARE IN THE ONCOLOGY OUTPATIENT SETTING

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Introduction

The national consensus among leading oncology organizations is that palliative care starts at diagnosis. However, in practice, this is often not the case. Palliative care has been stigmatized and is often seen as a transition to end of life care. Nurses can play a pivotal role in breaking down stigmas and integrating primary palliative care at the onset of oncology care.

Methods

The 1-2-3 Project is a nursing clinical improvement initiative. Beginning with the first 3 visits, the patient completes brief assessments that identify symptoms, psychosocial and palliative care needs. At systematic intervals, nurses engage patients in discussions of core values and goals as it relates to their cancer care. As these discussions can stimulate strong emotions, nurses were educated to use an “acknowledge, normalize, and partner” framework. These values discussions are utilized by the clinical team as they implement care delivery. Nurses also have access to palliative care nurse practitioners to help meet the patient’s needs.

Results

Over 2 years, 211 values discussions were conducted with newly-diagnosed hematologic and GI cancer patients. Two patients declined participation. Of 43 patients surveyed, 97.7% reported feeling comfortable with the process, 97.7% considered it helpful, and 95.3% would recommend it to others.

Conclusions

With the success of this pilot, the 1-2-3 Project is now being rolled out to other clinics for further evaluation and metric collection. Additionally, a nurse supportive care champions program has been developed, another resource to help integrate primary palliative care at the onset of cancer care.

eP457

EFFICACY AND SAFETY OF DUAL SOFOSBUVIR/DACLATASVIR THERAPY IN CHRONIC HEPATITIS C INFECTED SURVIVORS OF CHILDHOOD CANCER

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Introduction

Childhood cancer survivors are potentially at a higher risk of infection with hepatitis C virus (HCV) and little data is published on their treatment by the recently introduced direct acting antiviral (DAA) drugs. We aimed to test the efficacy, safety and tolerability of dual sofosbuvir/daclatasvir (SOF/DCV) DAA therapy in childhood cancer survivors infected with chronic HCV.

Methods

this prospective, uncontrolled, open-label multicenter study was done on 20 chronic HCV, genotype 4, infected children who had already been treated from leukemia/lymphoma. Their age ranged from 8 to 16 years. All patients were treated with a regimen of dual DAA drug therapy in the form of a single daily weight-adjusted dose of both Gratosovir (generic sofosbuvir) and Daktavira (generic daclatasvir) for 12 weeks. Patients were monitored throughout the treatment and follow-up period for safety and efficacy outcome measures including liver, kidney functions and hematological indices. Viremia was monitored at enrollment, 2 weeks (very rapid virologic response vRVR) and 12 weeks (end of treatment response EOTR) and the 12 weeks after end of treatment (sustained virologic response SVR 12)

Results

No fatalities or severe adverse events were reported throughout the study. All patients showed normalized liver enzymes with normal other liver, hematological, and renal function tests at the end of the study. The vRVR and EOTR were 100% and we project an intent -to- treat SVR12 rate to be 20 of 20

Conclusions

SOF/DCV combined therapy might be used safely and effectively in the treatment of chronic HCV genotype 4 infection in childhood leukemia/lymphoma survivors

eP458

WHO SHOULD BE SCREENED FOR THIOPURINE TOXICITY SECONDARY TO NUDT 15 POLYMORPHISM IN A DEVELOPING COUNTRY SETTING- A PILOT STUDY?

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Introduction

Germline polymorphisms in genes involved in thiopurine metabolism influences the response rate and toxicity profile following 6-mercaptopurine exposure. A risk stratified testing strategy is expected to reduce the expenses incurred in testing for NUDTP. The objective of this study was to identify clinico-laboratorial parameters (CLP) which could predict the existence of NUDTP

Methods

Twenty consecutive children with total leukocyte count (TLC) <4000/mm³ by seventh day of thiopurine exposure (SDTPE) during consolidation phase of ALL treatment were enrolled prospectively. Receiver operating curve (ROC) was utilized to derive cut-off points with sensitivity and specificity >90% in CLP. NUDTP was evaluated using allele specific real time PCR.

Results

The median age of the cohort was 11(2-15) years. The median duration of leukopenia (DOL) was 7(2-39) days with 35% children requiring >10 days to recover TLC. Homozygous and heterozygous NUDTP was observed in 15% and 35% of the cohort respectively. NUDTP could be predicted with 90% sensitivity and specificity whenever the TLC was <1650/mm³ by SDTPE. NUDTP could be predicted with 90% & 95% sensitivity and specificity respectively whenever the duration of leucopenia was >7.5 days. All 3 children with homozygous NUDTP had >18(21-39) days of leucopenia and TLC <700/mm³ by SDTPE. Children with NUDTP had treatment interruption for 19(12-35) days and 3 (2-7) FNE with 1 child succumbing to FNE.

Conclusions

TLC <1650/mm³ by SDTPE and DOL >7.5 days could be utilized as a threshold to screen for NUDTP. Prospective evaluation in larger sample size is needed to validate these cut-off points.

eP459

EFFICACY OF HIGHER DOSE VORICONAZOLE AS ANTIFUNGAL PROPHYLAXIS IN CHILDREN WITH NON-STANDARD RISK ACUTE LYMPHOBLASTIC LEUKEMIA- A DOUBLE BLINDED RANDOMIZED CONTROLLED TRIAL

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Introduction

Invasive fungal infection (IFI) force interruptions during acute lymphoblastic leukemia treatment. Antifungal prophylaxis (AP) is used to reduce the incidence of IFI. But the regimen for pediatric population is a subject of debate. The objective of our study was to assess the efficacy of higher dose (HD) voriconazole (9 mg/kg/dose BD) in comparison with standard dose (SD) (4mg/kg/dose BD) in preventing IFI in children with ALL.

Methods

A baseline serum galactomannan and computerised tomography (CT) chest was done before starting the BFM consolidation phase in non-standard risk ALL children. Hundred children with morphological remission at end of induction and no evidence of IFI at start of consolidation were included in the study. Fortnightly serum galactomannan and end of consolidation CT chest scan were performed in asymptomatic children and children with febrile neutropenia (FN) were evaluated as per the IDSA FN guidelines. IFI was diagnosed using EORTC/MSG definitions.

Results

Both the groups were comparable in age, sex, nutritional parameters & socio-economic status. Rate of IFI was significantly lower in HD group

(2% vs 18%- P< 0.001). There were 6%- proven IFI, 8% -probable IFI and 4%- possible IFI in SD group. The HD group had 2% possible IFI. Mortality secondary to IFI occurred more in SD group (6% vs none). The HD voriconazole therapy was tolerated well without any toxicity.

Conclusions

HD voriconazole prophylaxis is more effective than SD in preventing IFI. The limitation of the study was trough antifungal levels in serum were not estimated

eP460

UNDERSTANDING FAMILY DYNAMICS, DIFFERENCES BETWEEN PSYCHOTHERAPISTS' AND SOCIAL WORKERS' PERSPECTIVES.

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Introduction

A psycho-socio-educational team is dedicated to supporting children, teenagers and young adults with cancer. We were interested in complex social and family situations that hinder the care pathway. We aimed at reporting the complementarity between the therapists' and social workers' interventions through the clinical case of a 9-year-old child born to a family of four children, all of whom fall under a child protection measure. In what way does this collaboration at the heart of the health-care project contribute to restoring a link within the family sphere?

Methods

-Individual and collective interventions organised in collaboration with the child welfare services interviews, time for receiving the siblings in the centre; art therapy group for the siblings

-Multidisciplinary and partnership working, collegiality

Results

The effects of cancer on a family are numerous. This work enables to give new meaning to the role of each member within the family, to understand the interest of an investment, to encourage expression. This allows the family to better understand the issues related to illness and service, and to integrate this understanding of family functioning into care.

Conclusions

The complementarity of social and therapeutic interventions opens a new perspective for the patient and his/her family, contributes to better evaluating and understanding situations. These cooperative support methods ensure consistency in an increasingly personalised and qualitative care.

eP461

IRON OVERLOAD IN THE SURVIVORS OF CHILDHOOD ACUTE LYMPHOBLASTIC LEUKEMIA

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Introduction

Childhood acute lymphoblastic leukemia survivors receiving multiple packed red blood transfusion (PRBC) may be at risk of vital organ iron deposition causing serious late effects. This study was undertaken to

assess the frequency, anatomical pattern, and severity of iron overload in liver and heart by magnetic resonance imaging (MRI).

Methods

This cross-sectional study was conducted on 60 childhood ALL survivor (aged 6–18 years) and 30 apparently healthy age and sex-matching children as a control group. All participants were subjected to history taking, physical assessment, and laboratory investigations including complete blood picture, liver function and kidney function tests, C-reactive protein, serum ferritin and hepatitis markers in addition to quantification of the iron content of liver and heart by MRI

Results

Twenty-six (43.3%) of ALL Survivors showed evidence of increased liver iron concentration (LIC) by MRI ($T2^*7.2 \pm 5.2\text{msec}$). While only 2 (3.3%) children showed moderate cardiac iron overload ($T2^* 11.5\text{msec} \& 13 \text{ msec}$). The statistics showed a significantly positive correlation between liver $T2^*$ and serum ferritin, the total volume of blood transfused, the frequency of transfusions and HCV infection. There was no significant correlation between myocardial $T2^*$ values, serum ferritin, and transfusion therapy

Conclusions

liver iron overload was detected in children and adolescent after therapy of ALL. The risk of iron overload was related mainly to the transfusion burden during therapy.

eP462

CUTANEOUS MANIFESTATION AND PRESENTATION IN ACUTE LYMPHOBLASTIC LEUKEMIA IN NORTH WEST INDIA: AN INSTITUTIONAL EXPERIENCE

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Introduction

In acute monocytic leukemia and CD 30 positive large cell leukemia, skin lesion presentation is very common. Malignant skin involvement in acute lymphoblastic leukemia (ALL) is less known. This study has been designed to see frequency of skin lesions in childhood ALL at the time of diagnosis and during course of treatment.

Methods

A total of 326 Children with ALL after immunophenotyping (IPT) were included in the study from August 2015 to July 2018. Patients were grouped into standard risk and high risk categories of ALL. Skin involvement was observed at the time of diagnosis, during treatment and after completion of treatment. Lesion cytology and microbial culture were done during examination.

Results

Among 326 children enrolled, 32 presented with cutaneous manifestations. Among these 32, 22 belonged to standard risk ALL and rest to high risk category of ALL. Twelve children presented with generalised rash over whole body, 7 children presented with vesicular lesion and 6 with papules and blisters. Three children presented with bullous eruption with erythema, 2 with multiple ulcer over body and two with soft tissue necrosis. Nineteen children had at least one skin lesion over their head.

Conclusions

Study shows skin involvement can be an early manifestation of ALL. Skin leukemic infiltration can be seen in both standard and high risk

ALL, but more common among high risk ALL children. Further studies are needed for evaluation of skin evaluation among children with ALL.

eP463

CARING FOR TERMINALLY ILL CHILDREN -NEGATIVE IMPACTS ON THE DOCTOR'S WELL-BEING AND PERSONHOOD

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Introduction

Caring for children with terminal cancer risks burnout, compassion fatigue and moral distress. The impact upon the individual's personal narrative and how they see themselves is increasingly seen as a means of addressing the well-documented drawbacks of working with imminently dying children. This scoping review was conducted to present a comprehensive understanding of the negative impacts of working with critically ill children on the physician's well-being and personhood.

Methods

Using the PRISMA guidelines to inform the study methodology, databases PubMed, CINAHL, PsycINFO, Cochrane Library and grey literature (OpenGrey, EBSCO Open Dissertations) were searched for relevant articles. The initial search revealed 10,569 title and abstracts. Using the selection criteria agreed upon by the authors, and systematically sieving through title and abstracts and subsequently full texts, 41 papers were selected for analysis.

Results

The impact of caring for a terminally-ill child impacts the personal, relational and societal aspects of the physician's personhood. Personal elements affected include negative psycho-emotional outcomes like burnout, moral distress, depression, guilt, post-traumatic stress disorder negatively influencing how the physician views himself. Relational aspects of their personhood included adverse effects on professional & personal relationships. Poor job satisfaction, deterioration in professional development and performance impacted the societal aspects of personhood.

Conclusions

The well-being of physician care-givers working with terminally-ill children is critical to effectiveness and sustainability of the physician's individual careers. The findings of this study lends a novel perspective to lay the foundation for the development of person-centred support systems for physicians caring for children.

eP464

CARING FOR TERMINALLY ILL CHILDREN -HOW DO PHYSICIANS KEEP GOING?

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Introduction

Whilst literature is abound with discussions about burnout, death anxiety and compassion fatigue amongst physicians caring for children with

terminal cancer, little headway has been made in understanding what makes so many continue to persevere in these fields and continue to find satisfaction in their work. This study explores the positive and protective factors affecting physicians working with terminally ill children.

Methods

The initial search was conducted on databases PubMed, CINAHL, PsycINFO, Cochrane Library and grey literature (OpenGrey, EBSCO Open Dissertations). Using the agreed upon selection criteria, the final selection of papers were decided upon by the authors. Open coding and thematic analysis was carried out on these papers.

Results

Although moral distress was identified amongst physicians, many were still inclined to choose the same path if given a chance again. The factors that were found to contribute to personal growth, meaning finding and job satisfaction included having supportive colleagues, debrief sessions, greater exposure to death, higher professional self-esteem, being married, and male gender.

Conclusions

This is the first scoping review to our knowledge that focuses on positive and protective factors affecting physicians working with terminally ill children. The data forwarded should be the basis for the development and the maintenance of a protective and nurturing clinical and training environment and better availability to longitudinal, holistic, personalised, appropriate, specific and timely support for clinicians in the field.

eP465

COGNITIVE FUNCTIONS OF CHILDHOOD ACUTE LYMPHOBLASTIC LEUKEMIA SURVIVORS

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Introduction

Reports of long-term cognitive late effects after treatment for acute lymphoblastic leukemia (ALL) mostly come from high-income countries, whilst data from low-middle income countries are scarce. We aim to assess the cognitive functions of childhood ALL survivors and the associations between their cognitive functions and treatment load.

Methods

ALL survivors underwent Wechsler tests according to their age to determine their intelligence quotient (IQ). They were classified as standard risk (SR) and high risk (HR) based on National Cancer Institute criteria. They Individual cumulative doses of cytostatic agents, mainly Methotrexate (MTX) were extracted from the medical records for each patient.

Results

Thirty-four ALL survivors (17 SR and 17 HR) were enrolled. Mean follow-up time was 45.6 months. None of them received cranial irradiation. The SR and HR survivors received intrathecal MTX 60-72 mg and 140-168 mg, respectively. Both groups received 4300 mg/m² systemic (per oral and intravenous) MTX. The mean IQ of SR and HR survivor was 83.7 + 17.99 and 86.3 + 17.51, consecutively. There was no difference in IQ between SR and HR survivors ($P = 0.337$).

Conclusions

Survivors of childhood ALL treated exclusively with chemotherapy showed no impairment in general intellectual ability. No associations emerged between intelligence quotient and treatment burden.

eP466

NEUROBLASTOMA IN CHILDREN AGED LESS THAN 18 MONTHS: CLINICO-BIOLOGICAL FEATURES AND OUTCOME. A REPORT FROM A SINGLE INSTITUTION IN ALGERIA.

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Introduction

Neuroblastoma (NBL) is the most common neoplasm of early childhood with a particular large evolution spectrum. This study aimed to describe the clinico-biological profile and the outcome of children aged less than 18 months.

Methods

A prospective study including patients (0-18 months) initially diagnosed with NBL is performed from January 2005 to December 2018. Patients are evaluated at initial diagnosis by biochemical studies including plasmatic LDH, and urinary catecholamines (VMA, HVA) measure. Disease extension is documented by medullary and imaging exploration with a staging according to INRGSS. Analysis for MYCN gene is performed since 2010.

Results

117 patients are admitted with a sex-ratio of 1. 47% of patients presented with a localized disease. Primary adrenal tumor is the most frequent localization, no primary tumor was found within 3%. Bilateral or multifocal tumor was identified within 5%. Paraneoplastic manifestations are present within 4%. 63% of patients undergo conventional treatment including chemotherapy or/ and surgery, the remaining patients are just observed. Overall survival (OS) is 76%. OS is 63% for treated patients vs 100% for observed ones.

Conclusions

Neuroblastoma remains an enigmatic tumor demonstrating diverse clinical and biological characteristics and behavior. Tumors may regress spontaneously, or may exhibit extremely malignant behavior. Patients with 1, 2 and 4S stages exhibit the best OS rates. Regarding our working conditions, spontaneous regression, even followed only by ultrasounds, observational strategy seems to be an appropriate decision.

eP467

DOES ROUTINE SURVEILLANCE IMAGING AFTER COMPLETING TREATMENT FOR CHILDHOOD EXTRACRANIAL SOLID TUMOURS CAUSE MORE HARM THAN GOOD? A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

Regular off-treatment imaging and clinical review is often used to assess for recurrence of disease after childhood cancer treatment. It is unclear if

this increases survival, or what burden surveillance places on patients, families or healthcare services. This systematic review examines the impact of routine surveillance imaging after treatment of paediatric extra-cranial solid tumours.

Methods

Collaborative Patient and Public Involvement informed the design and interpretation of this work. Thirteen electronic databases, conference proceedings, and trial registries were searched alongside reference lists and forward citations, from 1990 onwards. Studies were screened and data extracted by two researchers. Risk of bias was assessed using a modified ROBINS-I tool. Relevant outcomes were overall survival, psychological distress indicators, number of imaging tests, cost-effectiveness and qualitative data regarding experiences of surveillance programmes. Registration PROSPERO (CRD42018103764).

Results

Of the 17800 records identified, 57 studies of 11172 patients with 2467 relapses were included within the review. Risk of bias judgement for almost all studies were moderate or serious. Meta-analysis was not appropriate; narrative synthesis was performed. Surveillance strategies were varied, and poorly reported, involving many scans and substantial radiation exposure (e.g neuroblastoma, median 133.5 mSv). Where reported, 1281 relapses were detected by surveillance and 952 by symptoms. For most diseases, surveillance imaging was not consistent with increased overall survival. No qualitative or psychological distress data was identified.

Conclusions

At present, there is insufficient evidence to support routine surveillance imaging in most paediatric extra-cranial solid tumours. More high-quality data is required, preferably through randomised controlled trials with well-conducted qualitative elements.

eP468

FREQUENCY OF QTc INTERVAL PROLONGATION IN PEDIATRIC PATIENTS ON METHADONE FOR CANCER RELATED PAIN

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Introduction

Methadone has been reported to prolong the corrected QT (QTc) interval and increase the risk of torsades de pointes. The QTc interval in pediatric patients depends on age and sex. Our study examined the frequency of QTc prolongation among pediatric patients starting methadone for cancer pain.

Methods

All patients followed a standardized protocol. Electrocardiograms (ECGs) were obtained at baseline (day starting methadone to 14 days prior), 1-2 weeks, and 4-6 weeks later. QTc values were manually calculated using the Bazett formula. QTc prolongation was defined as ≥ 460 milliseconds (ms) for pre-pubertal children, ≥ 470 ms for pubertal males, and 480 ms for pubertal females.

Results

Baseline ECGs were completed in 42 patients. Follow up ECGs were completed in 38/42 (91%) and 31/42 (74%) patients at 1-2 weeks and 4-6 weeks respectively. No patients had prolongation of the QTc at baseline and 1/38 (3%) patients had a prolonged QTc at weeks 1-2. This patient had a previous history of prolonged QTc that the family did not initially report. No patients had prolongation of the QTc at weeks 4-6. There was no evidence of torsades de pointes, ventricular fibrillation, or sudden death.

Median (IQR) baseline QTc was 389 (371, 399) ms; median (IQR) 1-2 week follow up QTc was 399 (374, 411) ms ($P=.13$) and median (IQR) 4-6 week follow up QTc was 393 (381, 422) ms ($P=.21$).

Conclusions

Initiation of methadone did not significantly increase the QTc interval. Prolonged QTc is rare in this population.

eP469

IMPLEMENTING PSYCHO-SOCIAL DISTRESS SCREENING AND INTERVENTION PROGRAM IN PEDIATRIC ONCOLOGY

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Introduction

Screening for psycho-social distress has become an integral part of comprehensive childhood cancer care.

Aim To streamline psycho-social distress screening and intervention among childhood cancer patients and their families.

Methods

We developed a distress screening multi-disciplinary team (MDT) with weekly rounds. We Utilized Psycho-social Assessment Tool 2nd edition (PAT). Based on the PAT score, a family's level of distress is classified as Universal, Targeted, or Clinical (highest risk). MDT formulates an individualized intervention plan for targeted and clinical cases, including psycho-education, counseling, social work intervention, and full psychiatric evaluation. Follow up screening is done within 6 months

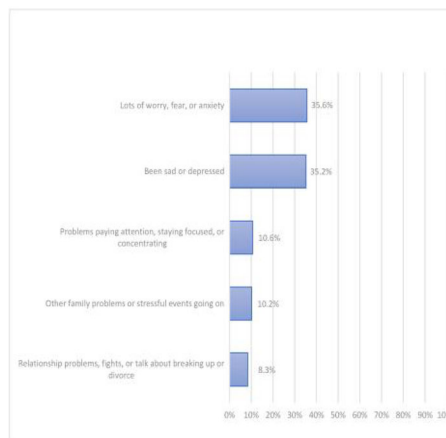
Results

128 PAT surveys were completed by 67 families of children with cancer. At least 1 follow up survey was obtained for 58%. Patient's mean age was 9.2 \pm 5 years. Younger patients were more cranky, scared, and worried (P<0.002). 31.3% of families showed PAT total score in the targeted risk range and 7.5% in clinical range (tab. 1). In the sub-scale analysis, 47% of families reported financial difficulties. 22.4% of caregivers reported high distress (Fig. 1 Shows distress types). Single, younger, and none college degree caregivers showed more distress (P=0.03). Siblings showed problems with mood and attention (14%), worry (9%), and sleep problems (5%). With intervention, 50% of families with targeted or clinical risk dropped at least one distress level with 42% returned to universal category.

Table 1. PAT 2.0 analyses with child and parents-reported variables

		Percentage (%)	PAT (mean score)
Patients Gender	Male	44.1%	.962
	Female	55.9%	.983
Patients age	<12 years	75%	1.0024
	> 12 years	25%	.879
Tumor Group	Leukemias	58.8%	.883
	Solid Tumors	41.2%	1.09
Care Givers Marital Status	Single	7.5%	1.334
	Married/partnered	77.6%	0.86
Care Givers Education Level	Separated/divorced	10.4%	1.27
	Widowed	1.5%	1.49
	Other	3.0%	1.4
Care Givers Education Level	Started school but didn't finish	6.1%	1.12
	Finished high school/got GED	19.7%	1.22
	Started college or trade school	16.7%	1.22
	Finished college or higher	57.6%	0.74
Financial difficulties	No	52.9%	0.692
	Some	38.2%	1.156
	Many	8.8%	1.95
Overall PAT score classification	Universal	41 (61.2%)	
	Targeted	21 (31.3%)	
	Clinical	5 (7.5%)	

Fig.1: Caregiver Stressors based on PAT screening



Conclusions

Psycho-social distress screening showed that childhood cancer impacts the entire family. MDT approach and targeted intervention based on PAT screening showed significant improvement in the entire family distress level.

eP470

WORLDWIDE INCIDENCE OF INVASIVE FUNGAL INFECTIONS IN PAEDIATRIC ONCOLOGY PATIENTS; A SYSTEMATIC REVIEW

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Introduction

Invasive fungal infections (IFIs) are an important cause of mortality and morbidity in children treated for malignancies. IFI is seen mostly in patients treated for AML, relapsed ALL and patients who underwent HSCT. There is evidence that the worldwide incidence rate is rising. The primary aim of this systematic review is to show the published worldwide incidence rate of IFIs. Our hypothesis is that geography plays a major role in the incidence of IFIs.

Methods

We will systematically search Ovid MEDLINE, Embase, CENTRAL, LILACS. Inclusion criteria are proven/probable IFI per EORTC criteria, paediatric oncology patients and original studies

Results

A total of 3,495 studies were identified, and 114 studies were included. Two reviewers independently reviewed the data. We present the reported incidence on a world heat map, see figure 1. The incidence ranged quoting no cases (0%) up to >25%. The studies reporting no IFIs all situated in Europe and North America, in comparison with the studies reporting the highest incidence, they were all situated in Asia, except the study with the highest incidence (69.9%), this study was situated in Europe.

Conclusions

There is a large range of reported incidence rates of IFI in paediatric oncology patients across the world. The world heat map does appear to identify certain regions with higher rates of IFIs that cluster together. Sub analysis of these regions can help identify potential causes of the higher incidence.

eP471

TRADITIONAL CHINESE MEDICINE IN PEDIATRIC ONCOLOGY: A SYSTEMATIC REVIEW OF CLINICAL STUDIES PUBLISHED IN THE CHINESE LITERATURE

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Introduction

The use of traditional and complementary medicine in oncology has become increasingly prevalent. In Asian countries like China, Traditional Chinese Medicine (TCM) is commonly used as a supportive treatment though the overview of its clinical evidence is scarce. Based on the existing Chinese literature, this systematic review summarizes clinical studies of TCM use in pediatric oncology.

Methods

A systematic search was conducted in six major Chinese biomedical databases for clinical studies (published before December 2018) of TCM therapies in pediatric patients (≤18 years) with cancer. Methodological quality of studies was assessed using the Jadad Scale.

Results

Forty-three reports were included, comprising randomized controlled trials (n=23, 53.5%) and controlled clinical studies (n=27, 62.8%). Studies focused on children with leukemia (60.5%), neuroblastoma (11.6%), and heterogenous cancer diagnoses (23.3%). Methodological quality of most studies (n=31, 72.1%) was modest due to suboptimal reporting on randomization method or sample inclusion/criteria. Herbal medicine was the most common intervention, with a total of 143 herbs reported (Supplement 1). Six acupoints and two auricular acupuncture points were identified in 7 (16.3%) studies (Supplement 2). The most frequently reported endpoints were reduction in chemotherapy-induced adverse effects (n=33, 76.7%), such as nausea/vomiting and fatigue, as well as response/survival outcomes (n=17, 39.5%), and quality of life (n=9, 20.9%) (Supplement 3).

Supplement 1: Classification of TCM Interventions Reported by Included Studies (n=43)

TCM intervention	Format	Number of studies	Frequency
Herbal medicine		39	90.7%
Oral medication		31	72.1%
	Decoction (including individualized preparation)	27	62.8%
	Proprietary	8	18.6%
	Not reported	3	7.0%
For external use		6	14.0%
	Topical	6	14.0%
	Bathing	5	11.6%
Injection		3	7.0%
Acupoint stimulation		10	23.3%
	Acupressure	9	20.9%
	Auricular acupressure	2	4.7%
	Moxibustion	4	9.3%
Others		16	37.2%
	Dietary therapy	9	20.9%
	TCM Holistic intervention	7	16.3%

Proportions do not add up to 100% as some studies include multiple interventions.

*Studies were extracted from the six major Chinese biomedical databases: China Online Journals (COJ)-Wangfang Data, Dissertations of China (DOC)-Wangfang Data, Academic Conferences in China (ACIC)-Wangfang Data, China Academic Journals Full-text Database (CJFD)-CNKI, China Masters' Theses & Doctoral Dissertations Full-text Database (CMFD & CDFD)-CNKI, China Proceedings of Conference Full-text Database (CPCD)-CNKI

Conclusions

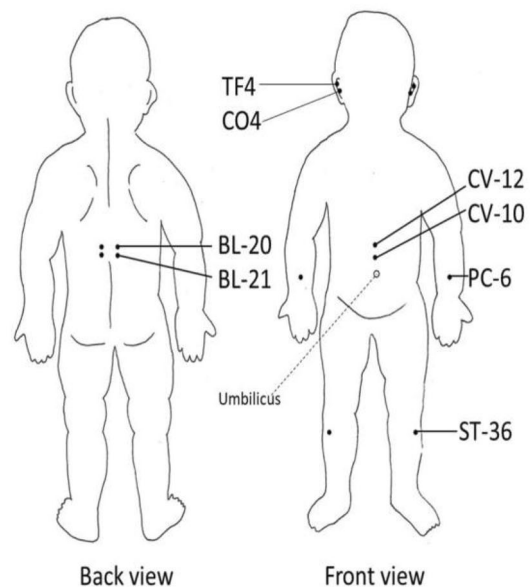
Preliminary evidence seems to support TCM as supportive therapy to alleviate treatment-related symptoms and improve health status in children with cancer. Reporting of clinical studies could be improved to synthesize more quality evidence and guide the use of TCM in pediatric oncology.

Supplement 2: Acupoints Identified in Included Studies (n=7)

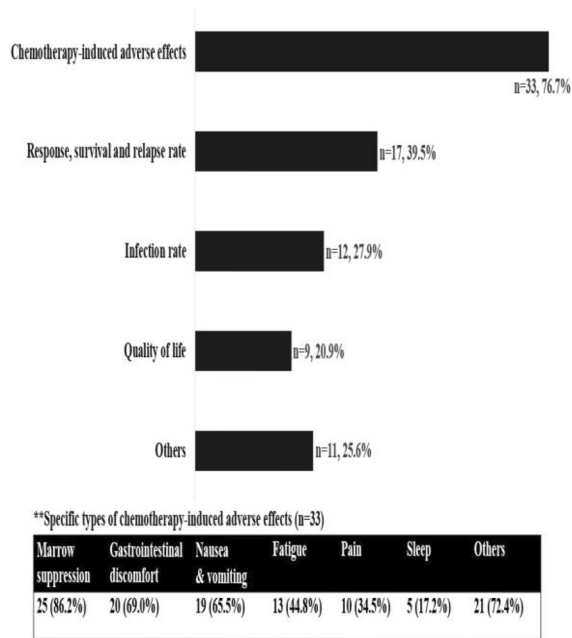
Acupoints (Code)	Meridian	Location*	Occurrence	Frequency
Zusanli (ST-36)	Stomach	Anterior leg	4	57.1%
Pishu (BL-20)	Bladder	Upper back	4	57.1%
Weishu (BL-21)	Bladder	Upper back	4	57.1%
Zhongwan (CV-12)	Conception Vessel	Upper abdomen	3	42.9%
Neiguan (PC-6)	Pericardium	Anterior forearm	2	28.6%
Shenmen (TF4)	--	Ear point in triangular fossa #	2	28.6%
Wei (CO4)	--	Ear point in concha #	2	28.6%
Xiawan (CV-10)	Conception Vessel	Upper abdomen	1	14.3%

Frequency of use = number of formulae in use of the acupoint/ total number of identified acupoints formulae. Proportions do not add up to 100% as some studies include multiple acupoints.

* WHO Standard Acupuncture Point Locations in the Western Pacific Region, 2008.
Auricular Acupuncture Point (WFAS STANDARD-002: 2012).



Supplement 3: Outcome Measurements Reported by Included Studies (n=43)



Proportions do not add up to 100% as some studies include multiple endpoints.

eP472

DEVELOPING AND IMPLEMENTING A SHARED UNDERSTANDING OF AGE-APPROPRIATE CARE FOR TEENAGERS AND YOUNG ADULTS

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Introduction

The global landscape for the delivery of young people's cancer care is complex and varied and can impact on cancer experience and outcome. Limited evidence exists to harmonise international delivery of care. We aimed to develop an evidenced based definition and operational model of age-appropriate care.

Methods

A mixed-methods study was conducted comprising 1) semi-structured interviews with young people (n=17), aged 13-24, and professionals (n=29); 2) an integrative literature review to identify current understanding of 'age-appropriate care'; 3) synthesis of these to form a conceptual model of age-appropriate care. A combination of qualitative content, thematic and framework analysis techniques were used. A narrative review examining the culture of care was undertaken and emerging themes mapped against the conceptual model, to assist in translating this new knowledge into practice, to inform care delivery.

Results

Our conceptual model of age-appropriate care comprises seven core themes best treatment; health care professional knowledge; communication, interactions and relationships; recognizing individuality; empowering young people; promoting normality; and environment. We expanded this model through a mapping process, adding to what is already known about the culture of care, offering greater understanding and knowledge to inform cultural change.

Conclusions

We present an evidence-based and comprehensive structure for defining and understanding age-appropriate care. Mapping onto this model evidence regarding culture, we provide greater discrimination of the components which would underpin an optimal climate of care for this population. Through translating this knowledge into practice, health services, globally, can facilitate best supportive care practices to this unique group.

eP473

INTERVENTIONS FOR OCCLUDED LONG-TERM CENTRAL VENOUS CATHETER IN PEDIATRIC CANCER PATIENT: A META-ANALYSIS

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Introduction

Thrombotic occlusion is one of the most frequent complications in catheters implanted in children.

Methods

Objective To identify the interventions used to treat thrombotic events in long-term central venous catheters in pediatric cancer patients.

Data Sources Electronic searches were performed in CINAHL, Cochrane CENTRAL, LILACS, Livivo, PubMed, Scopus, Web of Science, Google Scholar, Open Grey and ProQuest. There were no language or publication period restrictions.

Study Selection This systematic review included clinical trials and observational studies reporting the drugs used to treat thrombotic catheter events in pediatric cancer patients, in 2 phases. This review was reported according to the PRISMA Checklist. The protocol was registered at the PROSPERO under number CRD42018083555.

Data Extraction The authors evaluated quality of included studies using the MINORS and GRADE. The meta-analysis was performed using the STATA.

Results

A total of 10 studies were included. The drugs used to restoration of catheter function were: alteplase, urokinase and streptokinase. The results of meta-analysis of 9 studies showed an overall restoration rate of 85%. The drug type meta-analysis demonstrates a success rate of 88% and 77% for alteplase and urokinase groups, respectively.

Conclusions

In view of the evidence obtained, thrombolysis is effective and potentially safe in this population.

eP474

SYMPTOM PREVALENCE AND DISTRESS SEVERITY AMONG ADOLESCENTS AND YOUNG ADULTS RECEIVING CANCER THERAPY

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Introduction

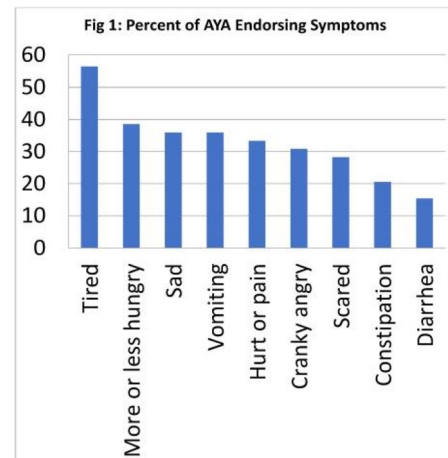
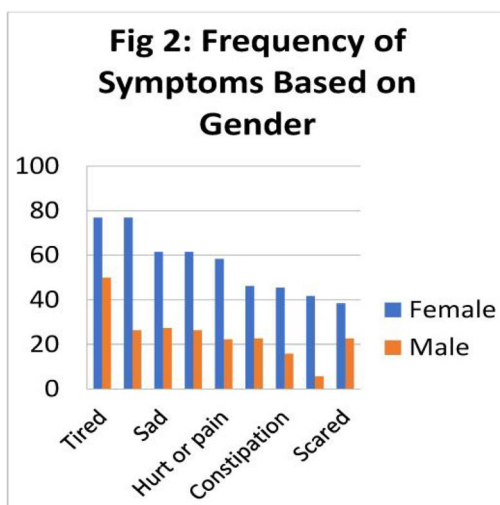
Rationale: Adolescents and young adults (AYA) with cancer are at risk for psycho-social as well as physical symptom burden during cancer therapy. Aim to explore psychological and physical symptoms and the degree of distress endorsed by AYA receiving cancer therapy.

Methods

Surveys were given in both inpatient and outpatient settings during cancer therapy to AYA patients (age 13–20 years). Symptom Screening in Pediatrics Tool (SSPedi) and Memorial Symptom Assessment Scale (MSAS) were used. The items from the MSAS that matched the SSPedi were included in this study. Symptom severity was rated on a 5-point Likert scale.

Results

Thirty-nine AYA patients were surveyed, 35% female, and 65% male. 43.6% were diagnosed with acute leukemia, 48.7% with solid tumors, and 7.7% patients did not report their cancer type. 78% of the AYA patients reported at least 1+ symptoms, with 45% reporting >3 symptoms. Of the physical symptoms that were most frequently reported; fatigue was the top (58%), followed by change in appetite (45%), nausea/vomiting (43%), and pain (40%) (See fig 1). AYA rated sadness as the most frequent psychological symptom (38%), followed by feeling angry (32%), and scared (30%). While more females reported symptoms than males ($P=0.01$) (fig.2), the type of cancer (leukemia versus solid tumors) did not show a significant difference.



Conclusions

AYA with cancer reported multiple symptoms with significant distress. More females reported symptoms compared to males. Screening AYA for cancer therapy related symptoms is important in understanding the trajectory of cancer therapy related effects among this population.

eP475

CIRCADIAN RHYTHM OF PRO AND ANTI-INFLAMMATORY CYTOKINES IN CHILDREN AND ADOLESCENTS WITH OSTEOSARCOMA

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Introduction

Circadian rhythm is pivotal in a number of physiological processes, including sleep/awakening and cancer progression. In osteosarcoma, a deep understanding of the complex cytokine interplay in oncogenesis may have prognostic significance for its course/progression. We aimed to measure cytokines levels in saliva of children and adolescents undergoing chemotherapy for osteosarcoma in 4 periods a day (1/4/9/14h after awakening), in order to characterize the cytokines circadian rhythm in a day of hospitalization and compare the findings between metastatic and non-metastatic patients.

Methods

A cross-sectional study was undertaken in a Brazilian Hospital. Six children and adolescents with a diagnosis of osteosarcoma receiving the same chemotherapy protocol were included and have donated 4 saliva samples (2 ml) on a day of hospitalization. ELISA technique was used to evaluate the cytokines levels.

Results

Most participants were male (66%), average age=12.5, and 33% had pulmonary metastasis. At the +1h awakening the average of

TGF- β concentration in non-metastatic patients was higher (210pg/ml) than average of TGF- β in metastatic patients (40pg/ml). At the +14h awakening the average of IL-6 concentration and TNF- α in metastatic patients showed respectively an increased levels (53pg/ml;120pg/ml) compared to the non-metastatic patients (35pg/ml;97pg/ml). The average in all 4 collection points of IL-1 β concentration was significant higher in metastatic patients than in non-metastatic patients ($p < 0,01$).

Conclusions

There are still several gaps in the literature to be addressed regarding the circadian rhythm in an attempt to improve osteosarcoma immunotherapy, given the clinical heterogeneity and the variable and individual immune response of the host.

eP476

SOCIODEMOGRAPHIC FACTORS ASSOCIATED WITH ACCEPTANCE ABILITY IN BREAST CANCER SURVIVORS DURING THE JOURNEY FROM CANCER PATIENT TO SURVIVOR IN INDIA

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Introduction

The ability to accept illness is a major issue in the life of a person with cancer. The purpose of this study was to explore and describe how sociodemographic factors affect in developing a patient's acceptance ability of present disease.

Methods

A purposive sampling technique was employed in the recruitment of the participants which consisted of 201 breast cancer patients those who were diagnosed and were willing to undergo the psychological assessment, with no history of past psychiatric illness. Acceptance level was defined by using Acceptance and Action Questionnaire (AAQ-II) and participants were classified as accepted or non-accepted the present situation. Both groups were compared regarding sociodemographic determinants through chi-square tests. Multivariate logistic regression analysis was used to evaluate the association between acceptance ability and variables of socio-demography.

Results

The mean age of the participants was 47.24±12.19 years. 56% cases (n=112) were primarily educated and 84.08% of the participants were (n=169) living with their spouse. The income status of patients ranges from <500 per family member to >3000 per family member. Highest percentage (38%) was seen in <500 income group while lowest percentages (6%) were seen among 2000-3000 income groups. 35.7% (N=72) were not and the difference was statistically significant ($p < 0.01$).

Conclusions

This study gave the overview of the sociodemographic factors have a significance effect on acceptance level. We will plan for future study to signify the utility and potentiality of Acceptance and commitment therapy (ACT) among breast cancer patients through reducing demographic issues.

eP477

PSYCHO-SOCIAL PROBLEM : MY TIME WITH CANCER.

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Introduction

Two months before my 16th birthday, I was preparing for a weekend with my mom to choose a dress for my college fresher ceremony. When I went to bed, my body ache, headache happened, so I took some pain killer and went to sleep. After being in so much pain that I was unable to sleep, I walked from my room to the kitchen to get a glass of water to take more medicine, and that's when it hit me. My physical problems were removed but unable to sleep due to psychosocial problems. Because, I have diagnosed cancer. My aim is to evaluate the emotional distress in cancer patients, including depression, anxiety, and suicidal ideation.

Methods

Home visit by volunteers and enumeration of the problems as discussed by the patient and their families. Simultaneously I visited my oncology clinic and try to relate my problems with them.

Results

Lack of awareness of the neighbor of local people about cancer and palliative care resulting in isolation of the family. During my treatment I faced severe stress, fear, physical and mental problems. I was able to overcome all the problems except one. That was social isolation. Neighbors, friends, relatives all shunned me, because of my cancer. They believed cancer is contagious.

Conclusions

Social effort to raise the awareness of neighbors and local people through discussion and other audio visual method (i.e. poster, leaflet, slide presentation, etc) will be break the social stigma for cancer.

eP478

FROM TELLING TO SHARING TO SILENCE: A LONGITUDINAL ETHNOGRAPHY ON THE DYNAMICS OF HEALTHCARE PROFESSIONAL - PATIENT COMMUNICATION ABOUT ORAL CHEMOTHERAPEUTIC TREATMENT FOR COLORECTAL CANCER.

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Introduction

Healthcare professionals are encouraged to promote concordance, a shared agreement about prescription and administration of medications, in their communication with patients. However, there is a paucity of research regarding the impact of communication about self-administered oral chemotherapy. The aim of this study was to examine the changing dynamics of communication through the patient journey from diagnosis of colorectal cancer to post treatment of chemotherapy.

Methods

Over 60 hours of observational data were digitally recorded from interactions between 15 healthcare professionals, 8 patients with colorectal cancer prescribed Capecitabine and 11 family members over a six-month period in outpatient departments within one hospital in the United Kingdom. Sixteen semi-structured interviews were conducted with patients during and after their treatment. Three focus-groups were carried out with healthcare professionals. These data were analysed using thematic analysis.

Results

The patient journey followed a path of four distinct phases: autocracy, physiological concordance, holistic concordance and silence. Initially, communication was medicalised with patients occupying a passive role. As patients continued their journey, they took a more active role in their treatment discussion by leading consultations and sharing their priorities of care. At the end of treatment, patients felt isolated and unsupported when they were discharged from their oncology team.

Conclusions

Communication about oral chemotherapy is not a static process; it evolves to take account of changing clinical requirements and growing patient confidence in dealing with their cancer. Different stages in the treatment journey indicate the need for different approaches to communication.

eP479

FEASIBILITY OF A MULTISITE VIDEOCONFERENCE QUALITY OF LIFE INTERVENTION FOR CANCER PATIENTS AND CAREGIVERS

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Introduction

Cancer patients and caregivers can experience distress and impaired quality of life. In person evidence based programs can benefit cancer patients. However, many cancer patients do not have access to these multidisciplinary interventions. Telemedicine has potential to improve access for cancer patients and their caregivers. **Objectives** This study explored the feasibility of a multi-site videoconference intervention to improve cancer patient and caregiver QOL

Methods

Patient and caregiver pairs were enrolled in a structured multidisciplinary intervention of 6 videoconference group sessions. The intervention was provided in person and simultaneously by teleconference to the other clinic locations. Groups were led by trained facilitators (psychiatrist, psychologists, chaplains, social workers, and physical therapists) covering topics including physical activity, psychosocial education, cognitive-behavioral therapy, spirituality and mindfulness. Feasibility was based on 20% retained recruitment for the telemedicine

Results

Recruitment was limited, suggesting this intervention was not appealing to cancer patients. For adherence, over the course of 12 months, there

were only 10 patient/caregiver pairs enrolled into the study. Of those pairs, 7 participated in person and 3 via videoconference (2 different locations). Seventy-one percent of in person pairs attended at least 4 of 6 sessions vs 33.3% of Telemedicine pairs.

Conclusions

The intervention had low recruitment adherence for the telemedicine locations. A lack of adequate on-site logistical support was one barrier in this study. Telehealth has potential to improve access for cancer caregivers to QOL interventions. However, more effective strategies are needed to overcome barriers to successful implementation.

eP480

PSYCHOSOCIAL INTERVENTIONS TO REDUCE CARERS' STRESS OF PALLIATIVE CANCER PATIENTS

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Introduction

Caregivers of Palliative cancer patients experience negative psychological, physical, social and financial sequelae. Depression rates between 12 and 59% and anxiety rates of between 30 and 50% have been reported. Family carers are commonly referred to as “hidden patients” and they may require support from health services. This service is provided by the ESMO designated psycho-oncology team of the Centre for Integrated Oncology and Palliative Care in our institution.

The aim of the present study is to assess carers' stress, when nursing their loved ones along with review of some of their psychosocial issues and measures taken to address them.

Methods

An audit of 30 patients' records was carried out by the Centre. Caregivers' stress at Kokilaben Dhirubhai Ambani Hospital was assessed using the Caregiver Burden Scale before & after psychosocial interventions with them as well as with the patients.

Results

The study results showed that before intervention burden was between severe to moderate and post intervention came down to moderate to minimal. More than 80% carers were ready to ask for repeated professional help and benefited from the same.

Conclusions

Stress among caregivers ultimately affects quality of care to the patient due to inadequate skills to cope with it, which is reduced by psycho-social interventions.

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LIVING WITH DIGNITY AMONG CHINESE CANCER PATIENTS UNDERGOING CHEMOTHERAPY: A QUALITATIVE STUDY

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Introduction

The empirical dignity model identifies various factors affecting cancer patients' dignity and provides practical guidance for dignity conserving

in palliative care. This study aims to describe dignity from the perspectives of Chinese cancer patients undergoing chemotherapy and explore the factors influencing their perception of dignity.

Methods

A qualitative description design was adopted to identify factors affecting patients' dignity. Semi-structured interviews were performed by a registered nurse with experience in palliative care research. A consecutive sample of cancer patients who were undergoing chemotherapy was recruited from a regional hospital in China. The data was analyzed by using inductive and deductive approaches.

Results

Fifteen cancer patients with age ranged from 28 to 66 years completed the interviews. Most themes in the three categories of the model, namely illness related concerns, dignity conserving repertoire and social dignity inventory, were found. However, the subtheme of death anxiety was not supported, four subthemes of generativity/legacy, maintenance of pride, role preservation and seeking spiritual comfort manifested differently. Three new themes, communication openness, family value and financial burden, emerged in the Chinese context.

Conclusions

The findings highlight Confucianism thought and financial condition in the construct of dignity. Family-oriented approaches with emphasizes on family value and filial piety are recommended to be incorporated into palliative care for Chinese cancer patients undergoing chemotherapy. The findings also call for attention to the impaired body image owing to the side effects of various cancer treatments and financial burden regarding the high hospitalization expenses and low reimbursement proportion of medical insurance.

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COPING STYLE AT DIAGNOSIS AND ITS ASSOCIATION WITH SUBSEQUENT HEALTH-RELATED QUALITY OF LIFE IN WOMEN WITH BREAST CANCER: A 3-YEAR FOLLOW-UP STUDY

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Introduction

We generated distinct coping style clusters of newly diagnosed women with breast cancer, and examined the longitudinal associations between coping style at diagnosis and subsequent health-related quality of life (HRQOL) over 3 years.

Methods

This was a prospective cohort study in South Korea. One hundred one women with breast cancer were enrolled at diagnosis (baseline) and then assessed annually over 3 years. At each assessment, participants completed the Mini-Mental Adjustment to Cancer (Mini-MAC) and the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 30.

Results

We identified two coping style clusters at baseline the fighting spirit (FS) cluster and the helpless-hopeless and anxious preoccupation (HHAP) cluster. The former is characterized by higher scores on the fighting spirit subscale of Mini-MAC and lower scores on the helpless-hopeless and anxious preoccupation subscales (n = 52, 51.5%). The latter is characterized by higher scores on helpless-hopeless and anxious preoccupation and lower scores on fighting spirit (n = 49, 48.5%). In the longitudinal analysis, the FS cluster showed better HRQOL than did the HHAP cluster

until 2 years after diagnosis; at 3 years, the difference in HRQOL between the clusters was non-significant for almost all aspects of HRQOL.

Conclusions

Maladaptive coping styles at diagnosis with breast cancer might predict poor HRQOL. Regular screening of coping styles and interventions that improve coping strategies should be considered from diagnosis until at least 2 years later.

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THE PSYCHOLOGICAL DISTRESS OF THE BREAST CANCER PATIENTS UNDERGOING CHEMOTHERAPY IN SPAIN AND INDONESIA

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Introduction

Psychological distress can be influenced by culture, socioeconomic factors, and health care system. This study aimed to identify and compare the psychological distress levels and sources of problems among patients with breast cancer undergoing chemotherapy in Spain and Indonesia.

Methods

This cross-cultural study used a descriptive-comparative, cross-sectional design. A total of 166 breast cancer patients undergoing chemotherapy in a central hospital in Oviedo, Spain and in Jakarta, Indonesia (83 patients each) participated in the study. Participants reported their distress using Distress Thermometer and its 39-item problem list. Analysis of variance and chi-square analyses were performed.

Results

More Indonesian patients reported higher psychological distress level than the Spanish patients did, yet the difference was not significant. Shared common problems in both groups were fatigue, worry/anxious, and sadness. The significant differences were found in practical problems: insurance/financial issue and work/school problems; physical problems eating, nausea, fever, bathing; and spiritual concerns which were dominant among Indonesian patients.

Conclusions

Patients with breast cancer reported elevated psychological distress during chemotherapy, especially in Indonesian women compared to Spanish women. The differences between psychological distress and its related problems are context-dependent, in which health system, socioeconomic condition, culture and religion play an important role. Health care professionals should acknowledge and address the patient's priorities in providing supportive care.

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EXPERIENCES AND SOCIAL SUPPORT NEEDS IN NEWLY DIAGNOSED PATIENTS WITH ACUTE LEUKEMIA – A QUALITATIVE STUDY

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Introduction

Acute Leukemia (AL) trajectory differs from most other cancer forms in having an acute onset followed by an intensive treatment regimen which

is often complicated by serious infections and a substantial symptom burden. Limited evidence exists on social support needs of patients with AL throughout the course of treatment. This is important in the new context of improved medical treatment, management of chemotherapy and administration of patient care. This study explores the experiences of patients newly diagnosed with acute leukemia undergoing treatment and their needs and preferences for social support.

Methods

Explorative semi-structured individual interviews were carried out in patients with AL (n=18) four to sixteen weeks post diagnosis. Thematic analysis was used to analyze the qualitative interview data.

Results

Identified themes were 1) Jolted by the diagnose and subtheme Loss of personal autonomy; 2) Restoring normality in everyday life and subtheme Facing a new social identity; and 3) A lifeline of hope. Being newly diagnosed with AL was experienced as traumatic, which negatively affected personal autonomy and everyday life. There was a pressing need to restore a sense of normality in everyday life while managing a new social identity as a cancer patient. Social support from family, friends and other patients were invaluable and experienced as an important lifeline.

Conclusions

Conclusion Receiving a life threatening diagnose and undergoing chemotherapeutic treatment had a negative impact on everyday life which required re-establishing daily life activities. This increased the need for social support which had a distinct role in facilitating the patients' coping strategy.

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PREVALENCE OF DEPRESSION IN CANCER PATIENTS IN SAUDI ARABIA

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Introduction

Depression is believed to be a significant health issue among cancer patients, if not recognized. It has a noticeable impact on the quality of their lives, it contributes to the severity of physical symptoms, and the acceptance of treatment also it might increase the stress in their families. Even though there are plenty of studies and systemic reviews that had been conducted in the area of depression in cancer population, the exact prevalence rate of depression in cancer patients remains unclear in Saudi Arabia. The primary objective of this research is to identify the prevalence of depression in cancer patients in Saudi Arabia using Patient Health Questionnaire-9 (PHQ-9).

Methods

This is a cross-sectional study was done on cancer patients either in patients or outpatients who seen in CCC at KFMC, Riyadh from August 2016 to November 2018. Questionnaire and the aim of study explained to the participants and informed consent obtained from all participants. The researcher interviewed the patient and fill up the following questionnaires PHQ-9. The studied population consisted of all patients above the age of 18 who will be admitted with definite diagnosis of a malignant hematology or oncology disease.

Results

We collected 150 Questionnaires. The prevalence of depression based on PHQ9 score is 42.3%.

Conclusions

The prevalence of depression among cancer patients in Saudi Arabia is 42.3% based on PHQ9 screening tool. Further studies need it to assess the percentage of major depression disorder among those patients and model of treatment.

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PSYCHOSOCIAL IMPACT OF BREAST CANCER ON SURVIVORS: A FOLLOW UP STUDY

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Introduction

Breast cancer is most common cancer among women in metro cities in India. Negative attitude of society and lack of social support, particularly from friends and family, are considered the barriers to adherence and self-care.

Objective To assess the psychosocial impact and social support system in survivors of breast cancer.

Methods

A follow up study was conducted in 10 major hospitals in selected rural and urban areas of Northern India. A total of 294 patients who survived breast cancer after treatment and/or on current treatment were selected after population proportionate to size sampling method and were interviewed using pretested pre-designed questionnaire after 4 months of treatment. Data was analysed using SPSS software (version 17). Chi-square were used and accepted statistically significant if p value was less than 0.05. Ethical clearance was taken from Ethics Review Board.

Results

Rural families were reported to be more supportive for treatment ($\chi^2=10.51$, $p=0.001$). More urban patients (41.9%) compared to rural patients (4.5%) perceived that disease would affect their married life ($\chi^2=19.15$, $p=0.001$), etc. It was found that more rural patients (88.9 %) felt disappointed compared to those residing in urban areas (61.9%) when they were told about the diagnosis ($\chi^2=11.82$, $p=0.001$). However, no significant difference in negative attitude and social support was found when gender, occupation and education status were assessed.

Conclusions

Psycho-social management of breast cancer need to be targeted and addressed. Management programs should find ways to build and improvise social support for cancer survivors.

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IMPACT OF HEALTH-RELATED STIGMA ON PSYCHOSOCIAL FUNCTIONING IN CANCER PATIENTS: CONSTRUCT VALIDITY OF THE STIGMA-RELATED SOCIAL PROBLEMS SCALE

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Introduction

Felt stigma is an internalized sense of shame about having an unwanted condition along with fear of discrimination due to imputed inferiority.

Cancer is associated with health-related stigma and individuals may experience stigma that strongly affect their quality of life. The Stigma-related Social Problems scale (SSP) was developed for measuring the impact of health-related stigma on social functioning in people with different diseases and disorders. The use of SSP has never been validated in cancer patients.

Methods

In 2017, SPP was sent to 1179 cancer patients with 28 different cancer diagnoses.

Tests of internal consistency reliability, construct validity, item-scale convergent validity, ceiling and floor effects, and known-groups validity were conducted. The aim of the study was to evaluate the validity of SSP in cancer patients.

Results

The response rate was 62% and the final sample comprised of 728 patients. Reliability coefficients were high for both scales. Factor analyses confirmed the unidimensionality and homogeneity of the scales. Item-scale correlations for both scales indicated satisfactory item-scale convergent validity. The proportion of subjects scoring at the lowest possible score level was 26% for the *Distress* scale and 28% for the *Avoidance* scale, while ceiling effects were marginal (< 1 %). The proportion of missing items was generally low, ranging from 1.4–1.5%.

Conclusions

SSP is a feasible instrument with sound psychometric properties that we have validated in a study on 728 cancer patients. The instrument can identify individuals at risk for psychosocial disturbances and thus in need of cancer rehabilitation and support.

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