

that algorithm of malaria could be used as an alternative way in early diagnosis for malaria in endemic area with limited facilities of microscopic laboratory examination.

OT2-08

Metabolic Syndrome Progression in Young Japanese Workers in A Selected Company

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Risk factors for metabolic syndrome are a common finding in routine health checkup in Japanese workplace. This study assesses relationship between risk factors and the progression of the metabolic syndrome in young and young adult Japanese workers.

A number of 5,640 Japanese workers of age 25, 30, and 35 years old were longitudinally studied for 5 years in one company. The metabolic syndrome parameters are as follows: Obesity: BMI>25; Hypertension: systolic Bp 130mmHg or diastolic Bp 85; Dyslipidemia: Cholesterol 220mg/dl or HDL-cholesterol<40 or Triglyceride 150; Hyperglycemia: Fasting blood sugar 100mg/dl. A subject was considered to have liver dysfunction if AST 31 or ALT 31 GTP 51.

Alcohol intake history was taken to see possible association. Chi-square (χ^2), Poisson and logistics regression were applied for statistical decision.

Over 5 years, 6.3% new workers significantly developed metabolic syndrome risk with male preponderance.

Relative risk is significant for all factors. Subjects with liver dysfunction at baseline exhibited metabolic syndrome components more than those without at baseline over 5 years. In 25-year group, subjects without any metabolic syndrome component at baseline developed more obesity and hypertension after 5 years. The 30- and 35-year group developed dyslipidemia in similar course of time. Logistic regression explored BMI and liver dysfunction to be independent for metabolic syndrome in 5 years, irrespective of age or alcohol intake.

Liver dysfunction and BMI are independently associated with metabolic syndrome in Japanese young workers.

groups of population as the foundation for research, the incipient plan for the Taiwan Biobank has been assailed by challenges and suspicions from human rights organizations. The crucial controversy lies in whether the public can comprehend the content of this significant national science plan, and whether or not the public supports the establishment of the Taiwan Biobank. The investigation reported here utilized telephone interviewing in the period November 22 through 29, 2007, and completed interviews with 2,499 persons; this achieves representation of the population with a level of confidence level of 95%, with a sampling error of no more than $\pm 1.96\%$. This research discovered that 82.2% of respondents agreed with the view that "a person's health is related to genetic heritage." 82.8% of respondents agreed with the "need to research the influence of life environment and a person's genetics on health." 76.6% of respondents agreed with the need for "long-term collection of material on public health, life, and genetics, in order to understand the causes of disease." 78.2% of respondents agreed with the need for a "Taiwan biological materials repository for long-term collection of material on public health, life, and genetics, in order to improve national health"; and only 9.9% felt this is unnecessary. The research team believes that the opposition of 10% of the public cannot be allowed to block the support of 80% of the public for establishment of the Taiwan Biobank. What is important is to find a way to carry out this policy in a way that can be accepted by the public, and that is the imperative that should be the responsibility of the government.

OT3-02

Prostate Specific Antigen as A Prognostic Factor for Biochemical Progression of Advanced Prostate Cancer Patients Receiving Hormone Treatment ***Chien-Hua Chen¹, Kuo-Liong Chien²***

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Background: The aim of this study is to identify prognostic factors affecting biochemical progression (BCP) of advanced prostate cancer patients receiving androgen deprivation therapy in Taiwan.

Methods and Findings: A cohort of men diagnosed with prostate adenocarcinoma ever receiving leuporelin acetate between November 1995 and April 2008 was collected from the computerized registry systems in two medical centers. A total of 107 eligible patients with newly diagnosed advanced (cT3 above) prostate cancer were assessed for the development of BCP and overall survival. All men had initial serum prostate specific antigen (PSA) measurements. Cox regression model and Kaplan-Meier analysis was used to evaluate the relationship between the clinical parameters and the BCP. A total of 54 patients (50.5%) had BCP during a median 46.1 months' follow-up. In a multivariate analysis, initial serum PSA greater than 105 ng/mL (relative risk [RR], 3.23; 95% confidence interval [CI], 1.66-6.29),

Oral Track 3- Clinical Research & Public Health

OT3-01

A Public Opinion Survey of Attitudes toward Genetic Epidemiology and the Taiwan Biobank

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Just as nations around the world have one by one been establishing depositories of genetic materials, with

pathological bone fracture (RR, 2.73; 95% CI, 1.37-5.44), and hemoglobin 12.7 g/dL or less (RR, 2.05; 95% CI, 1.10-3.81) were prognostic factors of BCP. As compared with those in the lowest tertile, participants in the highest tertile of initial PSA had nearly 3 times the age and body mass index (BMI)-adjusted risk of BCP (RR, 3.16; p for trend <0.009). Further adjustment for hemoglobin and the clinical diseases, the relative risk remained significant; the multivariate RR was 3.68 (p for trend <0.022).

Conclusions: Our data demonstrate that initial serum PSA is a significant risk factor for BCP for Taiwanese advanced prostate cancer patients.

OT3-03

Uric Acid Independently Associated with Atherosclerosis in Subjects without Metabolic Syndrome, Hypertension and Diabetes

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Background: Our previous study had reported that hyperuricemia was independently associated with cardiovascular events. However, the association between uric acid and atherosclerosis remains ambiguous. We aim to investigate the association between uric acid and atherosclerosis.

Methods and Materials: we enrolled 2790 subjects aged ≥ 30 years old from CardioVascular Disease FACTor in Two-township Study for this study. Common Carotid Artery Intima-Media Thickness (IMT) was used as the index of atherosclerosis. General linear model and logistic regression were used to assess the association between uric acid and atherosclerosis.

Results: Uric acid was associated with obesity, dyslipidemia, elevated blood pressure, impaired glucose, insulin resistance and IMT ($r: 0.12, p < 0.05$). The subjects with ≥ 9.0 mg/dl of uric acid (hyperuricemia) had significantly higher IMT (multivariate adjusted mean: 0.57 mm) than other groups (0.55 mm for < 5 , 0.55 mm for 5-6.9, 0.54 mm for 7-8.9 mg/dl), independent of other risk factors. Hyperuricemia (odds ratio: 2.67, 95% confidence intervals: 1.55-4.59) was significantly associated with atherosclerosis in multivariate model. This association remains significantly in low risk population (without metabolic syndrome, hypertension and diabetes).

Conclusion: uric acid was independently associated with IMT in threshold relationship in both general and low metabolic risk population.

OT3-04

A Randomised Controlled Trial Managing Co-Morbid Depression after Myocardial Infarction: Mood-Care

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Background: One in five people suffer from depression after myocardial infarction (MI) or heart attack. While depression impedes recovery, quality of life (QOL) and other outcomes, it continues to remain under-recognised and under-treated. We will conduct a randomised controlled trial of a state-of-the-art, telephone-delivered program (MOOD-CARE) for MI patients exhibiting depression and investigate its effectiveness in relation to depression and components of QOL.

Method: Newly diagnosed MI patients admitted to 5 hospitals in Australia will be screened for depression using Patient Health Questionnaire (PHQ-9) (n= 1619). Those with PHQ9=5-19 (mild-moderately severe depression) at discharge and a secondary diagnosis of depression at 2 weeks will be randomly assigned to a Usual Care (UC) or Intervention (MOOD-CARE) group. MOOD-CARE includes up to 10 telephone counselling sessions over 6 months, delivered by psychologists using Cognitive Behaviour Therapy (CBT) and coronary heart disease (CHD) risk factor management.

Results: It is anticipated that those receiving the MOOD-CARE program will demonstrate significant improvements in depression, QOL, vocational outcomes and CHD risk factors compared with the UC group at 12 months. Primary outcome measures will be depression (Cardiac Depression Scale) and QOL (Short Form-12 [SF-12] and Assessment of Quality of Life [AQoL 6D]). Conclusion: MOOD-CARE has the potential to improve psychological, QOL and vocational functioning in depressed MI patients. The study will provide valuable clinical and economic information about the value of the program and its translation into the health system.

OT3-05

Client Satisfaction of Services Provided to Infertile Couples in the Gynaecological /Sub Fertility Clinics in Sri Lanka

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Introduction: The outcome assessment in clinical practice needs to include measures of patient satisfaction with the service received. This study assessed client satisfaction among infertile women attending gynaecology/infertility clinics in the Colombo district, Sri Lanka.

Methods: The satisfaction of clinic services of 385 female partners of infertile couples attending gynaecology/subfertility clinics at four Teaching and two Base hospitals in the Colombo district were assessed

using a pre tested interviewer administered questionnaire.

Results: 52.7% of the women were satisfied with the services provided by the clinic and 13.5% were dissatisfied. Clients were most satisfied with politeness of the doctor (92.6%), the way the doctors performed their job (90%) and doctor's kindness (89.5%). Clients were most dissatisfied with explaining things (38.9%), opportunity to ask questions (32.5%) and emotional support from medical staff (31.2%). Clients attending specialised infertility clinics were more satisfied than clients attending gynaecology clinics. Satisfaction towards general functioning of the clinic was significantly higher among educated primary infertile women. Women who were > 35 years, married for > 5 years, had primary infertility and accompanied by the husband were more satisfied regarding the patient centered care provided by the doctors as compared to their respective counterparts. The emotional aspect of infertility was ranked as the most important aspect of care by the majority of clients.

Conclusions: Results suggest approximately half of the clients attending gynaecological /infertility clinics were satisfied with the clinic services with clients attending subfertility clinics being more satisfied than those attending gynaecology clinics.

OT3-06

Treatment Outcome of Kala Azar Patients Treated with Sodium Antimony Gluconate Sag and Miltefosine in Eastern Terai of Nepal

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A cross-sectional comparative study with purposive sampling was performed from the patients' registration book of Sagarmatha Zonal hospital and District Public Health Office Saptari, Nepal and the patients were interviewed at their households. The study aimed at to compare the treatment outcome like weight gain, remission of fever and skin color of Kala azar patients treated by Sodium Antimony Gluconate SAG and Miltefosine (Zenteris). The highest percent (57%) of patients were from 10-19 years age group. Male were more (59%). Patients were more (51%) from laborer group belonging to farming. Almost all the families were extremely poor. More than half (54%) of the decisions were taken by the father for the treatment place and treating physician. About 60% patients reported the good behavior of nurses and treating physicians. Highest (41%) percent of patients were visiting pharmacist first. The both direct and indirect treatment cost was found to be less for patients treated with Miltefosine in comparison to the SAG group. Initially during the drug distribution week the follow-up visit was more and gradually decreasing. Gastrointestinal side effect was high among the Miltefosine group whereas joint pain, palpitation,

rashes was high among the S.A.G group patients. Patients were attracted towards Miltefosine. One case of treatment failure was reported from SAG group. As the outcome of remission of Kala-azar, remission of fever, steady weight gain and improvement in hair colour, appetite, skin colour was reported in both the group with time but more rapid among the Miltefosine group. In this study, Miltefosine seemed to be having better performance for remission of Kala-azar. Further study with clinical and laboratory investigation is recommended in the same community in this regard

OT3-07

Oxidative Stress Byproducts, Antioxidant Activities, Electrolytes and Mineral Status in Stage I and II Human Hypertension

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Objectives: To evaluate the status of oxidative stress, lipid peroxidation, inflammation, lipid profile, electrolytes and minerals in prehypertensives, and stage I and II hypertensive male patients.

Design and Methods: Lipid profile, enzymic and non-enzymic antioxidants, lipid peroxidation, C-reactive protein, electrolytes and minerals were measured in blood of newly diagnosed prehypertensives, stage I and II hypertensives (n=20 in each group) and they were compared with their age matched normotensives.

Results: Elevated levels of lipid profile except HDL-C were observed in stage I and II hypertensive patients. Enzymic and non-enzymic antioxidants were significantly lower while the values for lipid peroxidation and C-reactive protein were significantly higher in prehypertensives, and stage I and II hypertensives. Significant elevation in plasma Na⁺ concentration was observed while the K⁺ was decreased. Serum levels of zinc, magnesium, and copper levels were significantly lower in prehypertensives, and stage I and II hypertensives as compared to normotensives.

Conclusions: The result of the study indicated that plasma and serum levels of antioxidants, lipids, C-reactive protein, electrolytes, zinc, copper and magnesium play a pivotal role in the pathogenesis and the development of elevated blood pressure.

OT3-08
A Public Opinion Survey of Attitudes toward the National Policy for An Integrated Biomedical Information System

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Our country's policy to develop the "Bio-Taiwan Policy" encompasses three major elements: centers for excellence in clinical trials; the national health information platform; and the Taiwan bio-bank. This research has compiled the miscellaneous challenges and suspicions of human rights and civil organizations towards biomedical research, as well as their proposals, and analyzed the views of the public toward the national policy for an integrated biomedical information system. In particular, it has carried out a national public opinion survey in order to assist in drafting a direction for policy. This opinion survey utilized telephone interviewing in the period December 2 through 9, 2008, and completed interviews with 2446 persons; this achieves representation of the population with a level of confidence level of 95%, with a sampling error of no more than $\pm 1.98\%$. The investigation discovered that most of the Taiwan public is concerned for the government's utilization of health information, and realizes the importance of the health information policy for provision of related information to the public. However, in the aspect of how the material is processed, they trust the government more than the research institutions. This seems to mean that the public expects the government to take on the responsibility for management of the materials and information; and under the condition that the public generally does not have trust in the confidentiality maintained by the related organizations, they will however support government utilization of individual private health information if given the precondition. This research concludes with a recommendation to the ELSI section of the Taiwan Biobank, that the government must itself take responsibility for the formulation of policy, rather than delegating it to a research team. Moreover, there must be bottom-up participation by the public, in the creation of relevant ethical governance mechanisms, in order to achieve the potential of recreating Taiwan as an island center of biotech research

Oral Track 4- Emerging & Re-emerging Infectious Diseases
OT4-01
The Development of A Tool to Assess Community Capacity of Sustainable Community-Based Dengue Prevention and Control: A Study in Southern Thailand

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The purpose of this study was to develop and test a new tool (DCCAT) to assess community capacity of sustainable community-based dengue prevention and control of 8 provinces in Southern Thailand. A mixed methodological approach of both qualitative and quantitative methods was data collection. The meaning and 10 themes of dengue community capacity were obtained from a qualitative method by In-depth Interviews of 60 leaders and Focus Group Discussions of 60 non-leaders. The quantitative method was used for developing items and for overall testing of the tool. The initial items were categorized for the leader and non-leader groups, and the item development was according to a range of five choices on a rating scale. This was then followed by a seven expert review panel assessing content validity and pilot-testing for reliability. The construct validity was administered to 964 leaders and 1,248 non-leaders and analyzed by utilizing the Exploratory Factor Analysis (EFA). This resulted in the finalization of the DCCAT of leaders and non-leaders with the DCCAT of non-leaders consisting of 83 items within 11 domains i.e. i) critical situation management, ii) personal leadership, iii) religion capacity, iv) community leadership, v) health care provider capacity, vi) senses of community, vii) communication of dengue information, viii) continuing activities, ix) dengue working group, x) resource mobilization, and xi) needs assessment. Another version of the DCCAT for leaders comprised 14 domains of 115 items, three more domains than the non-leaders, which included leader group networking, leader group and community networking, and community participation.

OT4-02
Retroviral Vector-Directed Sequence-Specific Sirna Suppresses West Nile Virus Replication in Human Neuroblastoma Cells

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West Nile virus (WNV) has been responsible for the largest outbreaks of arboviral encephalitis in U.S. history. However, there is no any specific antiviral therapy currently available for the effectively clinical treatment of WNV infection. To exploit RNA interference as a potential therapeutic strategy, a Moloney murine leukemia virus-based retrovirus vector was tested for effective delivery of siRNA targeting selected viral structural and non-structural genes of WNV into a human neuroblastoma cells (HTB-11). Retroviral vector-mediated expression of sequence-specific WNV siRNA was determined by the co-expression of the indicator reporter gene- eGFP and viral plaque assays demonstrated that transduced cell clones were significantly refractory to the replication of wildtype WNV (new York strain), as compared to untransduced control cells ($p < 0.05$). This experimental finding