

ISSN 2087-7021
E-ISSN 2338-3437



Volume 9
Number 2
December 2018
p. 63-118

Health Science Journal of Indonesia

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Volume 9 Number 2

December 2018 p. 63 - 118

Editorial

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Indonesia's readiness to implement the HPV vaccine mandatory for school age



Health Science Journal of Indonesia

ISSN 2087-7021



9 7 7 2 0 8 7 7 0 2 1 3 9



Acredited No: 1391/E/2016

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Health Science Journal of Indonesia

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Volume 9, 2018

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Printed by: Badan Penerbit Fakultas Kedokteran Universitas Indonesia.

Subscription: The journal is published bi-annually and should be subscribed for a full year

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E-mail: hsji.indonesia@gmail.com.

Published by: Lembaga Penerbit Balitbangkes, National Institute of Health Research and Development (NIHRD)
Ministry of Health Indonesia.

Accrediting number: 1391/E/2016

Health Science Journal of Indonesia

Volume 9, number 2, December 2018, pages 63-118

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WL 102.5

Masagus Zainuri, Ratih Rinendyaputri, Ariyani Noviantari, Ni Ketut Susilarini

Simple method to isolation and culture of neuron progenitor cells (NPCs) from whole brain post-natal rat

Health Science Journal of Indonesia 2018;9;63-9

Latar Belakang: Neurobiologi dipelajari menggunakan sel neuron dari kultur primer atau menggunakan *cell line* tergantung pada tujuan penelitian yang akan dilakukan. Berbagai metode dikembangkan untuk mendapatkan sel neuron pada bagian korteks, hipokampus atau dari semua jaringan otak dari otak fetus atau tikus yang baru lahir. Sel neuron tidak mampu berproliferasi sehingga perlu dikembangkan isolasi *neuron progenitor cells* (NPCs). Penelitian ini bertujuan untuk mengembangkan metode isolasi NPCs dari jaringan utuh otak tikus yang baru lahir secara mudah dan praktis.

Metode: Jaringan otak diperoleh dari tikus *Sprague Dawley* umur 2 hari. Eksperimen dilakukan dalam dua tahap yaitu memasukkan jaringan otak dalam kemudian diinkubasi selama 10 menit, menambahkan medium kultur disaring dan sentrifugasi selama 10 menit. Tahap selanjutnya memindahkan supernatannya dengan HBSS-glukosa, dimasukkan ke dalam larutan *Ficoll* 35% dan 65% dan sentrifugasi, selanjutnya supernatannya ditanam di cawan kemudian dipindahkan lagi pada cawan yang telah dilapisi dengan *poly-D-lysine*. Karakterisasi dilakukan dengan imunositokimia (NeuN dan *microtubule-associated protein*

2-MAP2) dan *flow cytometry* (PSANCAM⁺ and A2B5⁺) menggunakan penanda neuron.

Hasil: Dalam waktu kurang dari satu jam dengan menggunakan metode ini dapat diperoleh NPCs. Hasil menunjukkan bahwa diperoleh lebih dari 95% sel dengan PSANCAM⁺ dan A2B5. Setelah dikultur selama 4 hari, sel positif terhadap NeuN and MAP2.

Kesimpulan: Telah berhasil dikembangkan metode isolasi NPCs dari jaringan utuh otak tikus baru lahir yang mudah dan praktis dengan viabilitas dan kemurnian tinggi.

Kata kunci: tikus baru lahir, *neuron progenitor cells* (NPCs), isolasi

QY 24

Ida Susanti, Ni Ketut Susilarini, Vivi Setiawaty

Assessment of biorisk management implementation in NIH RD laboratory as national referral laboratory of emerging infectious diseases in Indonesia

Health Science Journal of Indonesia 2018;9;70-5

Latar belakang: Laboratorium Badan Penelitian dan Pengembangan Kesehatan (Balitbangkes) ditunjuk sebagai laboratorium rujukan nasional dalam mendeteksi penyakit infeksi Emerging (EID) dan bertugas dalam mendeteksi pathogen infeksi serta berperan penting dalam sistem penanggulangan wabah. Laboratorium Balitbangkes harus menerapkan sistem manajemen biorisiko untuk mencegah

terjadinya penyebaran penyakit yang bersumber dari laboratorium. Penerapan manajemen biorisk laboratorium yang terdiri dari biosafety dan biosecurity bertujuan untuk melindungi pekerja, lingkungan dan produk atau agen biologi. Penelitian ini bertujuan untuk menemukan kesenjangan terkait penerapan manajemen biorisk di Laboratorium Balitbangkes dengan standar.

Metode: Studi dilakukan oleh Asesor professional pada tahun 2015 dengan mewawancara Penanggung jawab Laboratorium BSL-3 (PJ BSL-3) dan Biosafety Officer (BSO) serta pemeriksaan dokumen. Pemilihan responden berdasarkan jabatannya di laboratorium. Responden dipilih karena sebagai pelaksana teknis dan memiliki informasi pelaksanaan biosafety dan biosecurity yang mendalam di laboratorium Balitbangkes. Pertanyaan diadopsi berdasarkan CWA 15793: 2011, berisi 160 pertanyaan dari 16 elemen. Analisis skor diinterpretasikan antara 0-2. Skor 0 memenuhi kesesuaian dengan standar dan skor 2 berarti tidak memenuhi standar.

Hasil: Studi ini menunjukkan 3 dari 16 elemen, memiliki kesesuaian penuh dengan standar yaitu teknik mikrobiologi yang baik, alat pelindung diri serta peralatan dan pemeliharaan alat laboratorium. Elemen yang memiliki kesenjangan paling tinggi adalah keamanan dengan skor 1.16. Tidak ada elemen yang dinilai tidak memenuhi kesesuaian standar atau skor 2.

Kesimpulan: Secara keseluruhan, Laboratorium Balitbangkes memiliki sistem manajemen biorisiko yang kuat dan sudah mapan disetiap elemen. Namun, tindakan perbaikan harus segera dilakukan di beberapa elemen untuk memenuhi standard CWA 15793:2011.

Kata kunci: EID Laboratory, biorisk management, laboratory assessment, CWA15793

WC 528

Reni Herman, Lisa Andriani Lienggonegoro

Clinical and virological profile of Dengue cases: a study in Samarinda and Manado

Health Science Journal of Indonesia 2018;9:76-81

Latar Belakang: Infeksi virus dengue masih merupakan masalah kesehatan di Indonesia. Studi ini dilakukan di Samarinda dan Manado, tujuannya untuk mendapatkan profil klinis dan virologi dari penderita anak dan dewasa di Wilayah Tengah Indonesia.

Metode: Ini merupakan studi deskriptif, kasus infeksi dengue didapat dari Rumah Sakit Umum di Samarinda dan Manado pada tahun 2012-2013. Sampel darah berasal dari penderita infeksi dengue yang dirawat di Bagian Anak dan Penyakit Dalam. Konfirmasi infeksi dengue dilakukan dengan pemeriksaan nested RT-PCR, deteksi antibodi Ig M dan Ig G dilakukan dengan capture ELISA untuk menentukan kemungkinan infeksi dengue maupun jenis infeksi. Definisi infeksi primer dan sekunder berdasarkan keberadaan antibodi Ig G. Profil klinis dijabarkan berdasarkan sampel terkonfirmasi infeksi dengue.

Hasil: Sebanyak 485 penderita ikut dalam penelitian ini, 40 % diantaranya terkonfirmasi infeksi dengue. Tiga puluh lima persen diantaranya kemungkinan terinfeksi virus dengue berdasarkan antibodi. Secara umum virus dengue serotipe 2 (DENV-2) paling banyak ditemukan pada penelitian ini, selain itu ditemukan juga infeksi campuran (2 serotip berbeda) di Samarinda. Sebanyak 72 % dari kasus terkonfirmasi infeksi dengue merupakan infeksi sekunder, demikian juga pada penderita anak. Demam, sakit kepala, mual dan nyeri pada perut merupakan profil klinis yang paling banyak ditemukan.

Kesimpulan: Keempat serotip virus dengue ditemukan dari kasus-kasus di RS Abdul Wahab Sjahranie, Samarinda dan RS. Prof. Dr. R.D. Kandou, Manado, secara umum DENV-2 merupakan yang paling dominan. Kebanyakan penderita sudah pernah terinfeksi dengue sebelumnya demikian juga penderita anak.

Kata kunci: Infeksi dengue, Samarinda, Manado

WB 330

Swandari Paramita, Evi Fitriany, M. Surya Tiyantara, Aditiya Setyorini, Trikortea E. Cahyasisit

Comparison of adherence to the use of herbal medicine with conventional medicine in Hypertensive patients at Lempake Public Health Center, Samarinda city

Health Science Journal of Indonesia 2018;9:82-6

Latar belakang: Hipertensi adalah masalah kesehatan utama di dunia, termasuk Indonesia. Penggunaan obat bahan alam untuk hipertensi telah meningkat dalam dekade terakhir. Biaya penggunaan obat bahan alam dianggap lebih murah dengan efek samping yang lebih sedikit. Penelitian ini bertujuan untuk melihat tingkat kepatuhan penggunaan obat pada pasien hipertensi yang berobat ke Pusat Kesehatan Masyarakat (Puskesmas) di Kota Samarinda, Kalimantan Timur.

Metode: Penelitian dilaksanakan di Puskesmas Lempake Kota Samarinda pada bulan Juli hingga Agustus 2017. Responden penelitian adalah 63 pasien hipertensi yang datang berobat dan memenuhi kriteria penelitian. Pasien hipertensi selanjutnya diwawancara menggunakan kuesioner MMAS (*Morisky Medication Adherence Scale*).

Hasil: Sebanyak 56% pasien hipertensi juga menggunakan obat bahan alam selain obat konvensional untuk hipertensi. Daun sirsak

(*Annona muricata*), daun salam (*Syzygium polyanthum*), dan buah mentimun (*Cucumis sativus*) adalah bahan alam yang paling banyak digunakan oleh pasien hipertensi. Rerata tekanan darah sistolik ($p=0,004$; 95% CI -19,8 – -3,8) dan diastolik ($p=0,038$; 95% CI -9,6 – -0,29) untuk pengguna bahan alam lebih rendah jika dibandingkan dengan pengguna obat konvensional. Rerata MMAS untuk pengguna bahan alam lebih tinggi jika dibandingkan dengan pengguna obat konvensional ($p=0,004$; 95% CI 0,31 – 1,6). Hal ini menunjukkan bahwa pasien lebih patuh menggunakan obat bahan alam dibandingkan obat konvensional untuk hipertensi.

Kesimpulan: Hasil penelitian menunjukkan perlunya edukasi pengobatan hipertensi ke komunitas, baik itu obat bahan alam maupun konvensional. Hasil penelitian juga menunjukkan kepatuhan yang lebih baik pada penggunaan obat bahan alam dibandingkan obat konvensional untuk hipertensi. Hal ini menunjukkan potensi menjajikan penggunaan obat bahan alam untuk hipertensi di masa depan.

Kata kunci: kepatuhan, obat bahan alam, hipertensi, Puskesmas Lempake Kota Samarinda

QU 766

Zuraida Zulkarnain, Agus Triyono, Fajar Novianto

Jamu formula could reduce plasma cholesterol patients with mild Hypercholesterolemia

Health Science Journal of Indonesia 2018;9:87-92

Latar belakang: Pengobatan hipercolesterolemia sering berlangsung seumur hidup sehingga menyebabkan penderita meninggalkan obat kimia dan memilih obat herbal. Penelitian ini merupakan uji klinik yang bertujuan untuk mengetahui khasiat dari formula jamu antikolesterol yang terdiri dari

daun jati belanda, daun jati cina, daun tempuyung, daun teh hijau, rimpang temulawak, rimpang kunyit dan herba meniran dalam menurunkan kadar kolesterol darah sebagai bagian dari program Saintifikasi Jamu.

Metode: Penelitian ini menggunakan metode kuasi eksperimental dengan desain pre dan post. Jumlah subjek 50 pasien dengan hiperkolesterolemia ringan yang memenuhi kriteria inklusi. Penelitian dilakukan di Rumah Riset Jamu (RRJ) Hortus Medicus Tawangmangu pada bulan September sampai Desember 2014. Uji statistik yang digunakan adalah uji t berpasangan dengan bantuan program SPSS 16.

Hasil: Formula jamu antihiperkolesterol yang diminum setiap hari selama 28 hari mampu menurunkan rata-rata kadar kolesterol plasma subjek dari 212,42 mg / dl menjadi 196,6 mg / dl. Uji t test berpasangan didapatkan hasil $p < 0,05$ yang berarti ada perbedaan rerata kadar kolesterol sebelum dan sesudah pemberian jamu.

Kesimpulan: Formula jamu antihiperkolesterol mampu menurunkan kadar kolesterol plasma pasien dengan hiperkolesterolemia ringan pada pemberian selama 28 hari.

Kata kunci: hiperkolesterolemia, jamu, Saintifikasi jamu

QV 89

Anggita Bunga Anggraini, Mardiaty Nadjib

Quality of life among Methadone Maintenance Treatment (MMT) patients with higher education

Health Science Journal of Indonesia 2018;9:93-9

Latarbelakang: Salah satu penilaian keberhasilan Program Terapi Rumatan Metadon (PTRM) yang merupakan program rehabilitasi terhadap pengguna narkoba -- khususnya pengguna

narkotika suntik -- adalah kualitas hidup klien. Oleh karena itu perlu diidentifikasi beberapa faktor yang dominan mempengaruhinya.

Metode: Penelitian dilakukan dengan desain potong lintang yang dilakukan di Puskesmas Kedung Badak dan Bogor Timur di Kota Bogor. Pengumpulan data dilakukan dengan wawancara dan pengisian kuesioner WHOQOL-BREF pada April-Juni 2018. Analisis dilakukan dengan menggunakan regresi linier multivariabel.

Hasil: Responden dalam penelitian ini berjumlah 62 orang. Hasil penelitian menunjukkan rerata skor kualitas hidup klien PTRM di Kota Bogor pada domain fisik sebesar 57,6; domain psikologis sebesar 57,5; domain sosial sebesar 63,6; dan domain lingkungan 63,9. Dibandingkan rerata skor populasi sehat di Indonesia, domain fisik dan psikologis lebih rendah daripada populasi tersebut, sedangkan domain psikologis tidak berbeda dengan populasi tersebut. Adapun skor domain lingkungan lebih tinggi dibandingkan populasi sehat Indonesia. Faktor yang dominan dalam menentukan kualitas hidup pada domain fisik dan lingkungan adalah tingkat pendidikan, sedangkan domain psikologis adalah dosis metadon. Faktor yang dominan dalam menentukan kualitas hidup domain sosial adalah adanya seseorang yang dapat diajak bicara.

Kesimpulan: Semakin tinggi tingkat pendidikan klien, maka kualitas hidup klien pada seluruh domain akan semakin baik. Klien PTRM dengan tingkat pendidikan yang lebih rendah harus dipantau untuk meningkatkan kualitas hidupnya. Penanganan klien dengan pendekatan individual dandukungan sosial dari keluarga dan teman diperlukan untuk meningkatkan motivasi serta kepatuhan klien dalam menjalani terapi metadon.

Kata kunci: kualitas hidup, metadon

W 84.4

Elfi Yennie, Dumilah Ayuningtyas, Misnaniarti

The role of the medical committee in hospital's clinical governance in Jambi Province

Health Science Journal of Indonesia 2018;9;**100-6**

Latar Belakang: Tata kelola klinis bertujuan untuk memastikan bahwa layanan kesehatan berjalan sesuai dengan standar keamanan yang tinggi dan kualitas berkelanjutan. Komite Medis bertanggung jawab untuk pelaksanaan tata kelola klinis yang baik di rumah sakit. Penelitian ini bertujuan untuk mengetahui peran Komite Medik dalam tata kelola klinis rumah sakit di era Jaminan Kesehatan Nasional (JKN) pada RS Umum Daerah (RSUD) di Provinsi Jambi.

Metode: Desain penelitian bersifat kualitatif. Pengumpulan data dari Agustus hingga Desember 2016 di tiga RSUD kelas C di Provinsi Jambi dan mencakup 23 informan yang diambil melalui wawancara mendalam dan Focus Group Discussion.

Hasil: Hasil penelitian menunjukkan bahwa Komite Medik belum berperan optimal dalam proses kredensialing, pemeliharaan mutu profesi dan penjagaan disiplin/etika profesi. Tugas dan fungsi kredensialing di beberapa rumah sakit belum berjalan sebagaimana mestinya (karena digunakan untuk persyaratan penerimaan dokter baru, tetapi tidak untuk menyaring kompetensi dokter), terkesan formalitas, serta sulit dilakukan karena belum memiliki Mitra Bestari. Kebijakan Jaminan Kesehatan Nasional memberi pengaruh baik terhadap peran komite medik dalam tata kelola klinis RS, karena terdapat beberapa regulasi atau peraturan pelaksana tentang JKN yang terintegrasi dengan peran komite medik, khususnya pada aspek kendali mutu kendali biaya.

Kesimpulan: Dapat disimpulkan Komite Medik secara umum belum berperan optimal dalam tata kelola klinis pada RSUD Kelas C di Provinsi Jambi. Oleh karena itu, rumah sakit perlu meningkatkan kompetensi, etika dan disiplin profesi medik,

serta penyempurnaan regulasi terpadu terkait tata kelola klinis di rumah sakit.

Kata kunci: komite medik, tata kelola klinis, RS, Jaminan Kesehatan Nasional.

QZ 204

DumilahAyuningtyas, Ni Nyoman Dwi Sutrisnawati

Indonesia's readiness to implement the HPV vaccine mandatory for school age

Health Science Journal of Indonesia 2018;9;**107-18**

Latar Belakang: Menurut WHO, dua dari 10.000 wanita di Indonesia hidup dengan kanker serviks dan diperkirakan 26 wanita meninggal setiap hari akibat kanker serviks. Berdasarkan kondisi ini, pemerintah Indonesia berencana menambahkan vaksin HPV ke dalam program imunisasi nasional. Tujuan penelitian adalah untuk menilai kemungkinan kesiapan Indonesia untuk menerapkan vaksin HPV wajib untuk usia sekolah dan faktor-faktor yang dapat mempengaruhinya.

Metode: Metode yang digunakan adalah systematic review. Melalui artikel terkait vaksin HPV yang terbit di jurnal terakreditasi dan scopus-indeks selama 10 tahun terakhir dengan kata kunci “Implementasi untuk Imunisasi HPV”, ditemukan sebanyak 17.000 hasil pencarian. Setelah itu, penilaian kritis pada artikel yang dipilih dilakukan dengan menggunakan metode PRISMA.

Hasil: Ditemukan bahwa kesadaran masyarakat, terutama orang tua, tentang vaksin HPV masih kurang, namun penerimaan mereka terhadap vaksin ini cukup positif. Ada beberapa faktor lain yang menjadi keberatan mereka terhadap vaksin, seperti harga tinggi, ketakutan akan efek samping, seksualitas, gender, dan sistem perawatan kesehatan. Saat ini di Indonesia vaksin HPV harus dibeli atas inisiatif mereka

sendiri dan bukan merupakan program wajib dari pemerintah pusat dan juga tidak diberikan secara gratis melalui program JKN. Namun demikian, Kementerian Kesehatan telah memulai proyek percontohan untuk menyediakan vaksinasi HPV gratis di beberapa daerah dalam Program Bulan Imunisasi untuk Usia Sekolah menggunakan kombinasi sumber daya pusat dan daerah.

Kesimpulan: Telah ada peraturan dan pedoman teknis untuk pelaksanaan proyek percontohan

vaksinasi HPV gratis, namun masih perlu penyesuaian dan dukungan dari Pemerintah jika akan dilaksanakan secara nasional dan disesuaikan dengan kondisi di daerah dengan fasilitas dan akses terbatas. Dibutuhkan peran pemerintah dalam memberikan informasi yang baik tentang vaksin HPV bagi masyarakat.

Kata kunci: Vaksin HPV, Kesiapan Implementasi, Program Imunisasi Nasional

Health Science Journal of Indonesia

Volume 9, number 2, December 2018, pages 63-120

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WL 102.5

Masagus Zainuri, Ratih Rinendyaputri, Ariyani Noviantari, Ni Ketut Susilarini

Simple method to isolation and culture of neuron progenitor cells (NPCs) from whole brain post-natal rat

Health Science Journal of Indonesia 2018;9;63-9

Background: Neurobiology is studied by neuron cells from primary cultures or cell lines depending on the purpose of the research. Various methods were developed to obtain neuron cells in the cortex, hippocampus or from all brain tissue from the fetal brain or newborn mice. Neuron cells are unable to proliferate therefore the isolation of neuron progenitor cells (NPCs) needs to be developed. This study aims to develop a method of isolating NPCs from intact tissue of newborn mouse brains easily and practically.

Methods: Brain tissue was obtained from Sprague Dawley rats aged 2 days. Experiments were carried out in stages which included deep brain tissue and then incubated for 10 minutes, adding filtered culture medium and centrifuging for 10 minutes. The next step is to move the supernatant with HBSS-glucose, put it in a 35% and 65% Ficoll solution and centrifugation, then the supernatant is planted in the cup and then transferred again to the poly-D-lysine cup. Characterization was carried out by immunocytochemistry (NeuN and microtubule-associated protein 2-MAP2) and flow cytometry

(PSANCAM + and A2B5-) uses neuron markers.

Results: In this study, our result show that this method does not take longer than one hours and more than 95% cells that obtained are expressing PSANCAM⁺ and A2B5⁻. After 4 days culture, cells exhibit positive for neuron marker as MAP2 and NeuN.

Conclusion: Successfully developed the easy and practical method to isolate NPCs from the whole brain of post-natal rat with high viability and purity.

Keyword: post-natal rat, neuron progenitor cells (NPCs), isolation

QY 24

Ida Susanti, Ni Ketut Susilarini, Vivi Setiawaty

Assessment of biorisk management implementation in NIH RD laboratory as national referral laboratory of emerging infectious diseases in Indonesia

Health Science Journal of Indonesia 2018;9;70-5

Background: NIH RD laboratory was appointed as a national referral laboratory to perform laboratory detection for emerging infectious disease (EID). Because of its important role, NIH RD laboratory must implement biorisk management system. A reliable high containment laboratory is crucial to perform laboratory diagnosis for EIDs and to avoid further spread of EIDs. The protection of

laboratory workers, environment, and biological agents is achieved by addressing laboratory biorisk management consist of laboratory biosafety and biosecurity measures. This study aims to find gaps related the implementation of biorisk management with standard.

Methods: This study was carried out by Professional Assessor in 2015 by conducting document checking and interviewing BSL-3 Technical Managers and BSO who were considered to have in-depth information regarding biosafety and biosecurity activities in NIH RD laboratory. Questionnaire developed based on CWA 15793:2011, which contain 160 questions provided from 16 elements of the standard. Analysis of the scores was interpreted between ranges of 0-2. Score 0 means full conformity and score 2 means doesn't meet the required standard.

Results: The study showed that only 3 out of 16 elements have full conformity with the standard. They were good microbiological technique, clothing and personal protective equipment, laboratory equipment and maintenance. The highest gap was in security elements with the score: 1.16. No elements has a non-compliance with the standard or score 2.

Conclusion: Overall the NIH RD laboratory has a strong biorisk management system already established which is working well in many areas. However, important action is needed in several elements in order to comply with the standard.

Keywords: EID Laboratory, biorisk management, laboratory assessment, CWA15793.

WC 528

Reni Herman, Lisa Andriani Lienggonegoro

Clinical and virological profile of Dengue cases: a study in Samarinda and Manado

Health Science Journal of Indonesia 2018;9:76-81

Background: Dengue infection is one of public health problem in Indonesia. This study was conducted Samarinda and Manado, which aimed to report of clinical and virological profile among hospitalized children and adult dengue patients in central region of Indonesia.

Method: This was a descriptive study, dengue cases were collected in general hospital in Samarinda and Manado from 2012 to 2013. Patient with dengue infection when admitted from pediatric and internal diseases ward included in this study. Sera were collected and nested RT-PCR was performed to confirmed dengue virus. Dengue Ig M/Ig G antibodies detected using capture ELISA for probability of dengue infection. Definition of primary and secondary infection was based on existence of IgG antibodies. Clinical profile was described base on confirmed results.

Results: Four hundred and eighty five cases were included; 40 % were confirmed dengue infection and 35 % were probably dengue infection based on antibody. Dengue serotype 2 was dominant from both sites, furthermore mixed infections were found in Samarinda. Seventy two percent of confirmed cases were secondary infection, likewise in children. Fever, headache, nausea and abdominal pain were the most common signs and symptoms of confirmed cases.

Conclusion: All four serotype of DENV found cases in Abdul Wahab Sjahranie Hospital, Samarinda and Prof. Dr. R.D. Kandou Hospital, Manado, generally DENV-2 were dominant. Most of the cases have been exposed to dengue infection previously similarly in children.

Key words: Dengue infection, Samarinda, Manado

WB 330

Swandari Paramita, Evi Fitriany, M. Surya Tiyantara, Aditiya Setyorini, Trikortea E. Cahyasit

Comparison of adherence to the use of herbal medicine with conventional medicine in Hypertensive patients at Lempake Public Health Center, Samarinda city

Health Science Journal of Indonesia 2018;9:82-6

Background: Hypertension is major health problem worldwide, including Indonesia. The use of herbal medicines for hypertension has increased in the past decade. The price of herbal medicines considered cheaper with fewer side effects. This study tried to see the level of adherence to the use of medicine by hypertensive patients in community health center at Samarinda City, East Kalimantan.

Methods: This study conducted at Lempake Community Health Center in Samarinda City from July until August 2017. The subjects of this study are 63 hypertensive patients and meet the sample criteria set by the researchers. The study interviewing hypertensive patients with MMAS (Morisky Medication Adherence Scale) questionnaire.

Results: The results showed 56% of hypertensive patients also use herbal other than conventional medicine. Soursop (*Annona muricata*) leaves, salam (*Syzygium polyanthum*) leaves, and cucumber (*Cucumis sativus*) fruit were the most frequent herbal medicines used by hypertensive patients. The mean blood pressure of herbal medicine users was significantly lower when compared with conventional medicine users for systolic ($p=0.004$; 95% CI -19.8 – -3.8) and diastolic blood pressure ($p=0.038$; 95% CI -9.6 – -0.29). The mean score of MMAS in herbal

medicine users was significantly higher when compared with conventional medicine users ($p=0.004$; 95% CI 0.31 – 1.6). This suggests that patients are more adherent in using herbal than the conventional medicine for hypertension.

Conclusion: The result of the study shows the need for herbal and conventional medicine education for hypertension in the community. The result also shows better patient adherence to herbal medicine compared to conventional medicine, as the promising future of herbal medicine for hypertension.

Keywords: adherence, herbal medicine, hypertension, Lempake Public Health Center Samarinda City

QU 766

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Jamu formula could reduce plasma cholesterol patients with mild Hypercholesterolemia

Health Science Journal of Indonesia 2018;9:87-92

Background: Treatment of hypercholesterolemia often lasts a lifetime, therefore patients leave chemical drugs and choose herbal medicines. The aim of this clinical study is to evaluate the efficacy of antihipercholesterol jamu formula consists of Guazuma ulmifolia leaves, Cassia senna leaves, Sonchus arvensis leaves, Camellia sinensis leaves, Curcuma xanthorrhiza rhizomes, Curcuma longa rhizomes and Phyllanthus niruri herbs to lowering cholesterol plasma level as part of Saintifikasi Jamu program.

Methods: This study was a quasi-experimental with pre and post test design. The total subjects were 50 patients with mild hypercholesterolemia who met the inclusion criteria. The research took

place at RRJ 'Hortus Medicus' Tawangmangu between September to December 2014. The data were analyzed using a paired t-test with SPSS 16 software.

Results: Results showed jamu anticholesterol formula which is taken every day for 28 days lowered the mean of cholesterol plasma level of 212.42 mg / dl to 196.6 mg / dl. Paired t test at 95% confidence level acquired p value <0.05, showed that there is significant differences in the mean cholesterol level subjects before and after the study.

Conclusion: The administration of jamu antihypercholesterolemia formula for 28 days could reduce plasma cholesterol level in subjects with mild hypercholesterolemia.

Keywords: hypercholesterolemia, Jamu, Sintifikasi Jamu

QV 89

Anggita Bunga Anggraini, Mardiaty Nadjib

Quality of life among Methadone Maintenance Treatment (MMT) patients with higher education

Health Science Journal of Indonesia 2018;9:93-9

Background: One of the objective in Methadone Maintenance Therapy (MMT) which is a rehabilitation program for injecting drug users is quality of life. The purpose of this study was to determine quality of life among MMT patients

Methods: The cross sectional study was conducted in Kedung Badak Primary Health Care and Bogor Timur in Bogor. Data were collected from interview and filling out WHOQOL-BREF

questionnaire from April-June 2018. Analysis was performed using multiple linier regression.

Results: Total subjects in this study was 62 subjects. The results showed mean scores for physical domain was 57.6; psychological domain was 57.5; social domain was 63.6; and environmental domain was 63.9. Compared with Indonesian ,MMT patient scores were higher in environmental domain and lower in physical and psychological domain while social domain had no different with it.. The dominant factor in determining physical and environmental domain was level of education, while the psychological domain was methadone dose, and the existence of someones to talk to was dominant factor for social domain.

Conclusion: The higher level of education, will produce better quality of life in all domains. MMT patients with lower level education must be monitored to improve their quality of life. It is suggested to treat patients based on individual approaches and support from family and friends is needed to motivate clients and adherence to the therapy.

Keywords: methadone , quality of life WE 500

W 84.4

Elfi Yennie, Dumilah Ayuningtyas, Misnaniarti

The role of the medical committee in hospital's clinical governance in Jambi province

Health Science Journal of Indonesia 2018;9;100-6

Background: Clinical governance aims to ensure that health services run according to high safety standards and ongoing quality. The medical committee is responsible for the implementation of good clinical governance of the hospital. This

study aims to analyze the role of the medical committee in the clinical governance of hospitals in the era of National Health Insurance (JKN).

Methods: The research design is qualitative. Data collection spans from August to December 2016 in three hospitals in Jambi Province and includes 23 informants who were observed throughout in-depth interviews and focus group discussions.

Results: The results show that the medical committee has not played an optimal role in the process of credentialing, maintaining professional quality, and guarding the discipline/professional ethics of the hospital. The duties and functions of credentials in some hospitals are not working properly (because used to apply to new doctor admission requirements, but not as to screen the competence of doctors), seem excessively formal and difficult to implement because they do not have Mitra Bestari yet. JKN policy has a good influence on the role of the medical committee in the clinical governance of the hospital, as there are several regulations that are integrated with the role of the medical committee, especially in the areas of quality control and cost control.

Conclusion: It can be concluded that the medical committee in general has not played an optimal role in the clinical governance of hospitals in Jambi Province. Therefore, it is necessary to improve the competence, ethics, and discipline of the medical profession in addition to integrating regulations related to clinical governance in hospitals.

Keywords: Medical committee, clinical governance

QZ 204

Dumilah Ayuningtyas, Ni Nyoman Dwi Sutrisnawati

Indonesia's readiness to implement the HPV

vaccine mandatory for school age

Health Science Journal of Indonesia 2018;9;**107-18**

Background: According to WHO, two out of 10,000 women in Indonesia live with cervical cancer and an estimated 26 women die each day from cervical cancer. Indonesian government is planning to add the HPV vaccine into the national immunization program. The objective is to assess the possibility of Indonesia's readiness to implement the HPV vaccine mandatory for school age and factors that may affect it.

Methods: The method was a systematic review through articles related to HPV vaccine which have been published in accredited and scopus-indexed journals for the last 10 years. With keywords "Implementation for HPV Immunization", founded 17,000 search results. Afterwards, a critical appraisal on the selected articles is conducted using PRISMA method.

Results: It is found that the awareness of community, especially parents, about HPV vaccine is still lacking, but their acceptance of this vaccine is quite positive. There are other factors into their objection to vaccines, such as the high price, fear of the side effects, sexuality, gender, and healthcare systems. Currently in Indonesia HPV vaccine must be purchased on their own initiative and is not a mandatory program of the central government. Neither has it been given free of charge through JKN program. Nevertheless, The Ministry of Health has begun a pilot project to provide free HPV vaccination in some areas within Immunization Month for School Age program using a combination of central and regional resources.

Conclusion: Although there have been regulations and technical guidelines for the implementation of the pilot project of free HPV

vaccination, it still needs adjustment and support from the Government if it will be implemented nationally and adapted to conditions in areas with limited facilities and access. The role of the

government is needed in providing good knowledge about the HPV vaccine for the community

Keyword: HPV Vaccine, Implementation Readiness, National Immunization Program