

Editorial

The Health Promotion Effectiveness on Mother Knowledge of Stunting Prevention in Toddlers: Literature Review

Resilience and Emotional Intelligence Related to Workers' Stress Level in the Quarter Life Crisis

The Bacterial Susceptibility of Levofloxacin for Urinary Tract Infections Bacteria in Type 2 Diabetes Mellitus Patients

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What Happens to Workers Who Work from Office Again During Covid-19 Pandemic?



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Editorial Note

Nutrition in Children during Covid-19 Pandemic and the Recovery Efforts

The COVID-19 pandemic has affected the social and economic situation of people around the world. With no treatment or vaccine available, Indonesia and other countries are relying on social distancing to slow the spread of the virus. Other interventions implemented by Indonesia are quarantine of those suspected of being infected, restrictions on domestic and international travel, bans on group gatherings and crowds and closure of schools, factories, restaurants and public spaces. These various efforts affect the economic and social aspects of society.

Difficulties in meeting basic needs due to economic hardship are increasingly affecting the nutritional status and survival of infants and children under five years (toddlers) in developing and developing countries. There has been an increase in the prevalence of malnutrition and especially wasting. The decline in nutritional status is caused by difficult access to food and a lack of health, nutritional and social services provided by various institutions.

Worsening nutritional status, especially wasting, is characterized by a compromised immunological condition, causing an increased risk of death, while stunting causes learning difficulties with a high probability of not reaching full cognitive potential. UNICEF reports that the COVID 19 pandemic will cause 15% or the equivalent of 7 million patients worldwide to increase the number of stunting cases due to acute malnutrition (wasting). Stunting is a major nutritional problem and the biggest challenge for Indonesian society.

In the Policy Direction and Action Plan for the 2020-2024 Public Health Program, the government targets reducing the number of stunting cases to 14 percent by 2024 or below 680 thousand cases per year. However, due to the COVID-19 outbreak, the number of stunting cases in Indonesia is expected to decrease and will increase. This can be caused by hampered access for mothers and children to obtain optimal health services. It was recorded that only 19.2 percent of Community Health Centres continued to carry out posyandu activities during the pandemic. Based on data provided by the Ministry of Health, the number of visits to antenatal care and health services for infants, toddlers and children has decreased so that immunization services, monitoring activities for the growth and development of infants and toddlers, as well as maternal and child health interventions have not been able to run optimally.

The government is working hard to work together with the world to conquer Covid 19. Various efforts to increase Covid 19 vaccination coverage, educate on the use of masks, always implement hand washing, use hand sanitizers are carried out continuously through various media, so that the economy revives. In parallel, the Indonesian government is also accelerating domestic vaccine production to meet domestic needs. Collaboration of scientist from different background with Indonesia vaccine company conducted research deserves appreciation.

Now, Pandemic is over and we can no physical distancing anymore, but public is advised to maintain health protocols by frequently washing their hands with soap or use hand sanitizer, wearing a mask if they are sick or have comorbidities, applying cough etiquette by covering their mouth and nose with their upper arm or a tissue.

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WA 590

Ghodiq Ufthoni, Bagoes Widjanark, Apoina Kartini,
Tri Joko

The Health Promotion Effectiveness on Mother Knowledge of Stunting Prevention in Toddlers: Literature Review

Health Science Journal of Indonesia 2022; 13;38-48

Latar belakang: Promosi kesehatan masyarakat adalah untuk meningkatkan kapasitas masyarakat untuk bertindak melalui instruksi langsung dari dan untuk masyarakat umum, agar memungkinkan mereka bertanggung jawab atas kesejahteraan mereka sendiri. Selain itu juga bertujuan untuk mengembangkan program yang berbasis pada keterlibatan masyarakat dalam kegiatan sosial yang mendukung hidup sehat. Stunting mulai terjadi saat anak berusia dua tahun dan terjadi saat embrio masih berada di dalam kandungan. Stunting adalah kondisi ketika tingkat keburukan normal seseorang lebih tinggi dari tingkat keburukan normal orang lain. Tujuan mengetahui pengaruh promosi kesehatan terhadap pengetahuan ibu tentang pencegahan stunting pada balita.

Metode: Kajian pustaka dilakukan dengan mencari di situs ilmu langsung, Pubmed, dan google scholar. Menggunakan kata kunci Pengaruh promosi kesehatan terhadap pengetahuan ibu tentang pencegahan stunting pada balita. Referensi dipilih berdasarkan kriteria: 1) jurnal terkait pencegahan stunting, promosi kesehatan, dan pengetahuan ibu; 2) tahun terbit 2017-2021; 3) jurnal yang dapat diakses sepenuhnya.

Hasil: Sebanyak 8362 jurnal dianalisis, namun tidak ada satupun yang sesuai atau berkaitan dengan bagaimana pendidikan kesehatan mempengaruhi kesadaran ibu tentang cara mencegah stunting. Dampak promosi kesehatan terhadap kesadaran ibu tentang pencegahan stunting kemudian ditunjukkan dari 25 referensi yang ditemukan.

Kesimpulan: Untuk mencegah stunting, promosi kesehatan melibatkan proses pembelajaran yang mengubah pola perilaku buruk menjadi baik.

Kata kunci: Promosi kesehatan, pengetahuan, ibu, balita, stunting

WM 172.4

Ice Yulia Wardani, Diva Aisyah Oktaviana, Riska Amalya Nasution

Resilience and Emotional Intelligence Related to Workers' Stress Level in the Quarter Life Crisis

Health Science Journal of Indonesia 2022; 13; 49-56

Latar belakang: Dewasa muda rentan mengalami stres akibat sulit menyelesaikan tugas perkembangannya, sehingga dapat terjebak pada quarter life crisis. Resiliensi dan kecerdasan emosi dibutuhkan untuk meminimalkan stres kerja.

Tujuan: Untuk mengetahui hubungan resiliensi dan kecerdasan emosi dengan tingkat stres pekerja pada masa quarter life crisis.

Metode: Penelitian ini menggunakan desain kuantitatif deskriptif korelatif dan desain cross sectional.

Hasil: 57% pekerja memiliki resiliensi rendah, 51,9% pekerja mempunyai kecerdasan emosi baik, dan 68,6% pekerja mengalami stres sedang. Hasil analisis mengidentifikasi adanya hubungan resiliensi dan kecerdasan emosi dengan tingkat stres pekerja pada masa quarter life crisis di DKI Jakarta ($p=0,001$).

Kesimpulan: Pekerja dengan tingkat resiliensi tinggi dan kecerdasan emosi baik mengalami stres lebih rendah dibandingkan pekerja dengan resiliensi rendah dan kecerdasan emosi rendah. Penelitian ini merekomendasikan adanya skrining rutin kesehatan

jiwa pekerja oleh pelayanan kesehatan serta institut pendidikan untuk memasukkan materi resiliensi, kecerdasan emosi, stres kerja, dan quarter life crisis. Peneliti merekomendasikan adanya kerja sama antara perusahaan dengan layanan kesehatan jiwa.

Kata kunci: Kecerdasan emosional, pekerja, resiliensi, stres kerja, quarter life crisis.

WJ 151

Zulfikar Dwi Kiswahyu Nindo, Mahyarudin Mahyarudin, Mardhia Mardhia, Andriani Andriani

The Bacterial Susceptibility of Levofloxacin for Urinary Tract Infections Bacteria in Type 2 Diabetes Mellitus Patients

Health Science Journal of Indonesia 2022; 13; 57-62

Latar Belakang: Diabetes melitus (DM) merupakan penyakit gangguan metabolik menahun yang memiliki karakteristik berupa hiperglikemia, kondisi ini dapat berkaitan dengan kerusakan organ jangka panjang, disfungsi organ, dan kegagalan berbagai organ dalam tubuh. DM tipe 2 mengakibatkan tingginya kadar glukosa dalam urin dan penekanan sistem imun, sehingga dapat menjadi faktor predisposisi terhadap infeksi saluran kemih (ISK). Terapi antibiotik yang dapat diberikan pada ISK adalah levofloksasin yang efektif terhadap banyak jenis bakteri penyebab ISK. Penelitian ini bertujuan untuk mengetahui pola sensitivitas antibiotik levofloksasin terhadap bakteri penyebab infeksi saluran kemih pada pasien diabetes melitus tipe 2.

Metode: Penelitian menggunakan metode deskriptif dengan total sampel sebanyak 22 isolat bakteri yang telah diisolasi dari pasien ISK dengan DM tipe 2. Isolat bakteri merupakan koleksi Laboratorium Mikrobiologi Fakultas Kedokteran Universitas Tanjungpura. Penelitian dilaksanakan pada bulan Juni – Oktober 2019. Pengujian sensitivitas antibiotik menggunakan metode difusi cakram dan menggunakan tabel Clinical & Laboratory Standards Institute (CLSI) sebagai panduan kriteria.

Hasil: levofloksasin sensitif terhadap bakteri ISK sebesar 95,45% dengan jumlah isolat sebanyak 21 dari 22 isolat uji. Pola sensitivitas levofloksasin yang bersifat sensitif pada jenis bakteri yaitu *Escherichia coli* (100%), *Pseudomonas aeruginosa* (100%),

Enterobacter aerogenes (66,67%), *Klebsiella sp.* (100%), dan *Shigella sp.* (100%).

Kesimpulan: levofloksasin sensitif terhadap bakteri penyebab ISK pada pasien DM tipe 2 dengan persentase sebesar 95,45%.

Kata kunci: Diabetes Melitus; Infeksi Saluran Kemih; Levofloksasin.

QU 500

Fera Ibrahim, Silvia Tri Widyaningtyas, Devia Puspita Natalicka, Ekawati Betty Pratiwi

Construction of Recombinant Plasmids encoding the sACE2-Fc Gene for the Development of SARS-CoV-2 Neutralization Test

Health Science Journal of Indonesia 2022; 13; 63-70

Latar Belakang: Infeksi COVID-19 disebabkan oleh Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). Keberadaan antibodi netralisasi dalam tubuh seseorang yang terinfeksi sangat diperlukan untuk mencegah infeksi virus. Antibodi netralisasi dalam serum konvalesen atau serum paska vaksinasi dapat dideteksi dengan beberapa teknik. Elisa kompetitif menggunakan antigen rekombinan RBD spike dan reseptor ACE2 merupakan salah satu teknik yang layak untuk dikembangkan karena teknik ini dapat diterapkan pada fasilitas yang tidak memiliki fasilitas BSL 2. Pada penelitian ini bertujuan untuk mendapatkan plasmid rekombinan yang dapat digunakan untuk produksi rekombinan soluble ACE2 (sACE2). Untuk meningkatkan aktivitasnya, sACE2 digabungkan ke bagian C- terminal dari Immunoglobulin F (Fc region).

Metode: Gen pengkode sACE2 dimasukkan ke dalam situs NheI dan BamHI menggantikan gen S-RBD dalam vektor pcDNA3-SARS-CoV-2-S-RBD-Fc. Keberadaan gen sACE2 dikonfirmasi menggunakan analisis restriksi enzim dan sekuensing.

Hasil: Hasil penelitian menunjukkan bahwa plasmid rekombinan pcDNA3-sACE2(WT)-Fc berhasil diverifikasi menggunakan enzim restriksi dan sekuensing sehingga dapat digunakan untuk produksi rekombinan soluble ACE2 menggunakan sel mamalia.

Kesimpulan: Proses konstruksi sACE2 kedalam plasmid pcDNA3-SARS-CoV-2-S-RBD-Fc telah berhasil dilakukan dan diverifikasi.

Kata kunci: SARS-CoV-2, sACE2-Fc, DNA rekombinan.

Kata kunci: Covid-19, pekerja pelayanan publik, persepsi, stres kerja, stresor kerja, *work from office*.

WC 506

Herqutanto, Beatrix Angelina Haryono, Dewi Yunia Fitriani, Astrid Sulistomo, Amilya Agustina.

What Happens to Workers Who Work from Office Again During Covid-19 Pandemic?

Health Science Journal of Indonesia 2022; 13; 71-78

Latar Belakang: Pandemi Covid-19 membuat pemerintah merubah regulasi untuk menekan penyebaran Covid-19, salah satunya dengan *Work From Home* (WFH). Saat kasus Covid-19 mulai menurun, perlahan mulai kembali *Work From Office* (WFO). Perubahan dari WFH ke WFO di masa pandemi Covid-19 menimbulkan tekanan yang membuat persepsi tertentu terhadap stres dan stresor kerja selama ini.

Metode: Penelitian ini mengkaji dinamika stres pada Kantor Pelayanan Publik Pajak Tangerang dengan menggunakan pendekatan metode campuran. Metode kuantitatif digunakan untuk mendeskripsikan stres kerja dan stresor dengan menggunakan SV-NBJSQ (Short Version New Brief Job Questionnaire) versi bahasa Indonesia. Metode kualitatif dengan wawancara mendalam semi terstruktur untuk memperoleh gambaran persepsi pekerja terhadap stres kerja dan stresor di WFO selama pandemi Covid-19.

Hasil: Dari hasil kuisisioner yang dikonfirmasi dengan wawancara mendalam, didapatkan hasil gejala stres yaitu rendahnya semangat kerja, kelelahan, ketakutan dan stres fisik, dengan stresor berupa keseimbangan kehidupan kerja yang negatif, Covid-19, dan beban kerja yang berlebihan.

Kesimpulan: Wawancara mendalam dapat menggali jawaban kuisisioner tentang gejala stres yang ada dan penyebab stres yang mendasarinya. Penelitian ini dapat menjadi bahan pertimbangan bagi perusahaan untuk mengambil langkah-langkah mengurangi stres kerja saat mereka mulai bertransisi menuju WFO.

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WA 590

Ghodiq Ufthoni, Bagoes Widjanark, Apoina Kartini,
Tri Joko

The Health Promotion Effectiveness on Mother Knowledge of Stunting Prevention in Toddlers: Literature Review

Health Science Journal of Indonesia 2022; 13;38-48

Background: The goal of public health promotion is to increase people's capacity for action through direct instruction from and for the general public, in order to enable them to take responsibility for their own well-being. It also aims to develop programs based on getting people involved in social activities that support healthy living. Stunting begins to occur when a child is two years old and occurs when the embryo is still inside the womb. Stunting is a condition when someone's normal level of badness is higher than the normal level of badness for someone else. Aim examine the effect of health promotion on mothers' knowledge about stunting prevention in toddlers.

Method: Literature review is done by searching on direct science sites, Pubmed, and google scholar. They used the critical word The effect of health promotion on mothers' knowledge of stunting prevention in toddlers. References were selected based on the criteria of 1) journals related to stunting prevention, health promotion, and maternal knowledge, 2) 2017-2021 published years, and 3) fully accessible journals. Results: A total of 8362 journals were analyzed, but none of them fit the bill or had anything to do with how health education affects mothers' awareness of how to prevent stunting. The impact of health promotion on mothers' awareness of stunting prevention is then demonstrated from the 25 references found. In order to prevent stunting, health promotion involves a learning process that transforms bad behavior patterns into good ones.

Conclusion: Health promotion is a learning process carried out to change unhealthy behavior patterns into healthy behavior so that stunting can occur.

Keywords: Health promotion, knowledge, mothers, toddlers, stunting

WM 172.4

Ice Yulia Wardani, Diva Aisyah Oktaviana, Riska Amalya Nasution

Resilience and Emotional Intelligence Related to Workers' Stress Level in the Quarter Life Crisis

Health Science Journal of Indonesia 2022; 13; 49-56

Background: Young adults are vulnerable to stress due to difficulty completing their developmental tasks, which would make them be trapped in a quarter-life crisis. Resilience and emotional intelligence are needed to minimize work stress.

Objectives: To investigate the relationship between resilience and emotional intelligence with stress levels in workers during the quarter-life crisis.

Methods: A quantitative descriptive, correlative, and cross-sectional design was used for the research. Results: 57% of workers had low resilience, 51,9% had good emotional intelligence, and 68,6% experienced moderate stress. The results of the analysis identified a relationship between resilience and emotional intelligence with the stress level of workers during the quarter-life crisis in DKI Jakarta (p=0.001).

Conclusions: Workers with high resilience and good emotional intelligence experience lower stress than workers with low resilience and low emotional intelligence. This study recommends regular screening of workers' mental health by health services and also for educational institutes to include

material on resilience, emotional intelligence, work stress, and quarter-life crisis. Researchers recommend cooperation between companies and mental health services.

Keywords: Emotional intelligence, quarter life crisis, resilience, work stress, workers.

WJ 151

Zulfikar Dwi Kiswahyu Nindo, Mahyarudin Mahyarudin, Mardhia Mardhia, Andriani Andriani

The Bacterial Susceptibility of Levofloxacin for Urinary Tract Infections Bacteria in Type 2 Diabetes Mellitus Patients

Health Science Journal of Indonesia 2022; 13; 57-62

Background: Diabetes mellitus (DM) is a chronic metabolic disorder characterized by hyperglycemia, and can be associated with long term organ damage, organ dysfunction, and multiple organ failure. Type 2 DM causes high glucose levels in urine and suppression of the immune system, as in result it becomes a predisposing factor for urinary tract infections (UTIs). The antibiotic therapies that can be given in UTIs is levofloxacin which is effective against many types of bacteria that cause UTIs. This study aimed to determine the pattern of levofloxacin sensitivity against the bacteria that cause UTIs patients with type 2 DM.

Methods: The study used a descriptive method with a total sample of 22 bacterial isolates that had been isolated from UTIs patients with type 2 DM. The bacterial isolates were collections of the Microbiology Laboratory, Faculty of Medicine, Tanjungpura University. The study was conducted from June to October 2019. The antibiotic sensitivity test used the disc diffusion method and interpretation based on the Clinical & Laboratory Standards Institute (CLSI).

Results: levofloxacin was sensitive to UTIs bacteria by 95,45% with a total of 21 isolates from 22 isolates. The levofloxacin sensitivity pattern which was sensitive to types of bacteria such as *Escherichia coli* (100%), *Pseudomonas aeruginosa* (100%), *Enterobacter aerogenes* (66,67%), *Klebsiella sp.* (100%), and *Shigella sp.* (100%).

Conclusion: levofloxacin is sensitive against bacteria that cause UTIs in type 2 DM patients with a percentage of 95,45%.

Keywords: Diabetes mellitus; Urinary Tract Infections; Levofloxacin.

QU 500

Fera Ibrahim, Silvia Tri Widyaningtyas, Devia Puspita Natalicka, Ekawati Betty Pratiwi

Construction of Recombinant Plasmids encoding the sACE2-Fc Gene for the Development of SARS-CoV-2 Neutralization Test

Health Science Journal of Indonesia 2022; 13; 63-70

Background: COVID-19 infection is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The presence of neutralizing antibodies in the body of an infected person is necessary to prevent viral infection. The presence of neutralizing antibodies in seroconvalesen or post vaccinated sera can be measured by several techniques. Competitive Elisa using recombinant RBD spike antigens and ACE2 receptors is one of techniques that viable to be developed since this technique can be applied in facility that does not have a BSL 2 facility. In this research was aimed at obtaining a recombinant plasmid that could be used for the production of the soluble ACE2 recombinant (sACE2). To enhanced its activity, the sACE2 was fused to the C-terminal portion of Immunoglobulin F (Fc region).

Methods: The sACE2 coding gene was inserted within the NheI and BamHI sites replacing sRBD gene in the pcDNA3-SARS-CoV-2-S-RBD-Fc vector. The presence of sACE2 gene was confirmed using restriction enzyme analysis and sequencing. Results: The result showed that the recombinant pcDNA3-sACE2(WT)-Fc plasmid was successfully verified using restriction enzymes and sequencing so that it can be used for the production of recombinant soluble ACE2 using mammalian cells.

Conclusions: The construction process of sACE2 into the pcDNA3 SARS-CoV-2-S-RBD-Fc was successfully carried out and verified.

Keywords : SARS-CoV-2, sACE2-Fc, Recombinant DNA

WC 506

Herqutanto, Beatrix Angelina Haryono, Dewi Yunia Fitriani, Astrid Sulistomo, Amilya Agustina.

What Happens to Workers Who Work from Office Again During Covid-19 Pandemic?

Health Science Journal of Indonesia 2022; 13; 71-78

Background: The Covid-19 pandemic has brought the government to make regulatory changes to suppress the spread of Covid-19, one of which is to Work From Home (WFH). Today, as Covid-19 cases began declining, offices slowly began returning to the Work From Office (WFO). Changes from WFH to WFO during the Covid-19 pandemic created pressure that made certain perceptions of stress and work stressors during this period.

Method: This study examined the stress dynamics at the Tax Public Service Office in Tangerang using a mixed method approach. Quantitative methods were used to describe work stress and stressors using the Indonesian version of the SV-NBJSQ (Short Version New Brief Job questionnaire). Qualitative methods with semi-structured in-depth interviews were used to obtain an overview of workers' perceptions of work stress and stressors in WFO during the Covid-19 pandemic.

Results: From the results of the questionnaire which were confirmed with in-depth interviews, we found that the results of stress symptoms were similar, namely low vigor, fatigue, fear, and physical stress, with stressors in the form of negative work-life balance, Covid-19, and work overload.

Conclusion: In-depth interviews could explore the questionnaire answers about existing stress symptoms and the underlying stressors. This research can be a factor for consideration for companies to take steps to reduce work stress as they began transitioning towards WFO.

Keywords: Covid-19, public service workers, perception, work stress, work stressors, work from office.