

# Aktivitas Fisik Untuk Mengatasi Hipertensi

Jurnal Untuk Masyarakat Sehat (JUKMAS). JUKMAS. Hubungan Aktivitas Fisik dengan Hipertensi Pada Lanjut Usia di Puskesmas Kutasari.

Hipertensi adalah kondisi terjadinya peningkatan tekanan darah sistolik lebih dari ? 140 mmHg dan atau diastolik ? 90 mmHg. Aktivitas fisik merupakan salah satu faktor yang mempengaruhi kejadian hipertensi. Peningkatan aktivitas fisik direkomendasikan sebagai sarana untuk mencegah terjadinya hipertensi. Tujuan penelitian ini adalah untuk mengetahui hubungan aktivitas fisik dengan hipertensi pada lanjut usia di Puskesmas Kutasari. Jenis penelitian yang digunakan adalah penelitian kuantitatif dengan desain deskriptif korelatif. Sampel dalam penelitian ini adalah pasien hipertensi di wilayah Puskesmas Kutasari Kabupaten Purbalingga sebanyak 105 orang. Hasil penelitian didapatkan umur responden paling banyak adalah lansia tua (75 - 90 tahun) sebanyak 48 responden (45%) dan jenis kelamin paling banyak adalah perempuan sebanyak 67 responden (63.8%) serta tidak ada hubungan aktivitas fisik dengan hipertensi pada lanjut usia di Puskesmas Kutasari ( $p$  value = 0.142). Tidak ada hubungan aktivitas fisik dengan hipertensi pada lanjut usia di Puskesmas Kutasari ( $p$  value = 0.142). Tenaga kesehatan diharapkan memberikan edukasi yang lengkap dan jelas kepada pasien tentang pentingnya aktivitas fisik bagi penderita hipertensi.Kata kunci: Aktivitas Fisik, Hipertensi, Lanjut Usia AbstractHypertension is a condition where there is an increase in systolic blood pressure of more than 140 mmHg and/or diastolic 90 mmHg. Physical activity is one of the factors that influence the incidence of hypertension. Increased physical activity is recommended as a means to prevent hypertension. The purpose of this study was to determine the relationship between physical activity and hypertension in the elderly at Kutasari Health Center. The type of research used is quantitative research with a descriptive correlative design. The sample in this study were 105 people with hypertension in the Kutasari Public Health Center, Purbalingga Regency. The results showed that the majority of respondents were elderly (75 - 90 years) as many as 48 respondents (45%) and the most gender was female as many as 67 respondents (63.8%) and there was no relationship between physical activity and hypertension in

the elderly at the Puskesmas. Kutasari (p value = 0.142). There is no relationship between physical activity and hypertension in the elderly at Kutasari Health Center (p value = 0.142). Health workers are expected to provide complete and clear education to patients about the importance of physical activity for people with hypertension. Keywords : Physical Activity, Hypertension, Elderly

. Program GERMAS "Melakukan Aktivitas Fisik" Sebagai Upaya Pencegahan Penyakit Hipertensi.

Gerakan Masyarakat Hidup Sehat (GERMAS) merupakan upaya promotif dan preventif guna meningkatkan pola hidup sehat di masyarakat. GERMAS adalah sebuah Gerakan yang bertujuan untuk memasyarakatkan budaya hidup sehat serta meninggalkan kebiasaan dan perilaku masyarakat yang kurang sehat. Langkah Gerakan Masyarakat Hidup Sehat yaitu melakukan aktivitas fisik, makan buah dan sayur, tidak merokok, tidak mengkonsumsi minuman beralkohol, melakukan cek Kesehatan secara berkala, menjaga kebersihan lingkungan, dan menggunakan jamban. Hipertensi sangat dipengaruhi oleh banyak faktor. Salah satu faktor yang berpengaruh terhadap kejadian hipertensi yaitu aktivitas fisik. Hipertensi atau tekanan darah tinggi adalah meningkatnya tekanan darah pada dinding rongga di mana darah itu berada. Tekanan darah tinggi (Hipertensi) adalah suatu peningkatan tekanan darah di dalam arteri. Hiper artinya berlebihan, Tensi artinya tekanan. Jadi hipertensi adalah gangguan sistem peredaran darah yang menyebabkan kenaikan tekanan darah diatas normal.

. Jurnal Kedokteran dan Kesehatan. JKK. Hubungan Aktivitas Fisik dengan Kejadian Hipertensi pada Perempuan Etnis Minangkabau di Kota PadangHubungan Aktivitas Fisik dengan Kejadian Hipertensi pada Perempuan Etnis Minangkabau di Kota Padang.

Hipertensi merupakan penyakit tidak menular, memiliki dua faktor risiko yaitu tidak dapat diubah salah satunya aktivitas fisik, etnis Minangkabau mempunyai kejadian terkena hipertensi 78,6% yang berkaitan dengan gaya hidup salah satunya kurangnya aktivitas fisik dengan penderita pada perempuan 36,9%. Tujuan penelitian ini untuk mengetahui hubungan aktivitas fisik dengan kejadian hipertensi pada perempuan etnis Minangkabau. Jenis penelitian yang digunakan adalah observasional analitik dengan pendekatan case control. Populasi terjangkau dalam penelitian ini adalah semua perempuan etnis Minangkabau yang menderita

hipertensi di Puskesmas Anak Air kota Padang dengan 52 sampel case dan 52 sampel control menggunakan teknik purposive sampling. Analisa data univariat dan bivariat disajikan menggunakan software SPSS. Perempuan etnis Minangkabau dengan hipertensi mayoritas adalah yang tidak bekerja dan beraktivitas fisik ringan. Tidak terdapat hubungan yang signifikan antara pekerjaan dengan hipertensi ( $p$  value = 0,076), namun terdapat hubungan yang signifikan antara aktivitas fisik dengan hipertensi ( $p$  value = 0,046) pada perempuan etnis Minangkabau. Bagi masyarakat terutama perempuan etnis Minangkabau yang mengalami hipertensi diharapkan dapat meningkatkan aktivitas fisik agar dapat mencegah komplikasi kardiovaskuler.

. Hasil Karya 'Aisyiyah untuk Indonesia. Hayina. Penanganan hipertensi dengan senam dan aktivitas fisik.

Hipertensi, atau tekanan darah tinggi, menjadi penyebab utama kematian di seluruh dunia. Kondisi ini meningkatkan risiko berkembangnya berbagai penyakit serius, seperti gangguan jantung, stroke, dan kerusakan ginjal. Di Jawa Tengah, pada tahun 2019, hipertensi tercatat sebagai kasus paling dominan di antara penyakit tidak menular lainnya, mencakup hingga 68,8% dari seluruh kasus. (Dinas Kesehatan Provinsi Jawa Tengah, 2020). Senam hipertensi termasuk dalam olahraga dan aktifitas fisik yang dapat memicu jantung agar bekerja lebih optimal. Senam dan juga aktivitas fisik mampu menjaga kestabilan tekanan darah. Sasaran peserta pada kegiatan ini adalah warga masyarakat yang memiliki riwayat hipertensi serta yang memiliki keluarga dengan keturunan hipertensi, sedangkan tujuan dari kegiatan ini yaitu untuk memberikan pengetahuan kepada masyarakat mengenai cara penanganan hipertensi dengan senam dan aktivitas fisik. Kegiatan ini dilaksanakan di Desa Karanganyar, Kecamatan Weru, Sukoharjo pada bulan April 2024 yang dihadiri oleh 40 peserta. Kegiatan pengabdian ini diawali dengan pemeriksaan kesehatan dan faktor resiko penyakit tekanan darah tinggi, selanjutnya kegiatan dilanjutkan dengan melakukan senam hipertensi secara bersama dan ditutup dengan penyuluhan kesehatan dan diskusi. Hasil dari pengabdian ini menunjukkan peningkatan yang signifikan dari nilai pre test dan post test yang telah dilakukan oleh para peserta. Tingginya antusias dari warga masyarakat untuk meningkatkan kualitas hidup sehat mendorong untuk mengadakan kegiatan pengabdian yang berkelanjutan, sehingga masyarakat terus bisa mendapatkan

informasi yang akurat tentang upaya untuk meningkatkan kualitas kesehatan.

. Jurnal Riset Kesehatan Masyarakat. JRKM. Aktivitas Fisik Lansia untuk Mengontrol Hemodinamik melalui Kombinasi Senam Tera dan Senam Pernapasan (SETAPA) pada Lansia dengan Hipertensi. Journal of Nutrition College. J. NutriColl.

HUBUNGAN ASUPAN SERAT, NATRIUM DAN AKTIVITAS FISIK TERHADAP KEJADIAN OBESITAS DENGAN HIPERTENSI PADA ANAK SEKOLAH DASAR.

HUBUNGAN ASUPAN SERAT, NATRIUM DAN AKTIVITAS FISIK TERHADAP KEJADIAN OBESITAS DENGAN HIPERTENSI PADA ANAK SEKOLAH DASAR.

Latar belakang : Obesitas berkaitan dengan sindrom metabolik salah satunya hipertensi. Obesitas dengan hipertensi tidak hanya terjadi pada dewasa tetapi juga masa anak dan remaja, salah satunya anak Sekolah Dasar (SD). Faktor yang dapat mempengaruhi kejadian obesitas dengan hipertensi antara lain asupan serat, asupan natrium, dan aktivitas fisik.Tujuan : Mengetahui hubungan asupan serat, natrium, dan aktivitas fisik terhadap kejadian obesitas dengan hipertensi pada anak SD.Metode : Desain penelitian case control study dengan matching usia dan jenis kelamin dari 3 SD di kota Semarang. Subjek penelitian terdiri dari 33 kelompok kasus (obesitas dengan hipertensi) dan 33 kelompok kontrol (tidak obesitas tidak hipertensi). Kriteria obesitas menggunakan indikator IMT/U dan tekanan darah menggunakan indikator persentil. Asupan serat dan natrium dihitung dengan food frequency questionnaire (FFQ) semi kuantitatif dan aktivitas fisik menggunakan kuesioner aktivitas fisik. Analisa data menggunakan uji Chi Square.Hasil : Hasil analisis menunjukkan tidak ada hubungan signifikan antara asupan serat ( $p=0,46$ ), natrium ( $p=0,28$ ), dan aktivitas fisik ( $p=0,33$ ) terhadap kejadian obesitas dengan hipertensi. Asupan serat ( $OR=0,69$ ;  $95\%CI=0,26-1,83$ ) dan aktivitas fisik ( $OR=0,61$ ;  $95\%CI=0,23-1,62$ ) bukan merupakan faktor risiko kejadian obesitas dengan hipertensi. Asupan natrium ( $OR=2,22$ ;  $95\%CI=0,51-9,76$ ) merupakan faktor risiko terjadi obesitas dengan hipertensi, tetapi hasil inkonklusif.Kesimpulan : Asupan serat, natrium, dan aktivitas fisik tidak berhubungan terhadap kejadian obesitas dengan hipertensi. Asupan natrium yang tinggi meningkatkan risiko 2,22 kali kejadian obesitas dengan hipertensi pada anak SD.

. Jurnal Untuk Masyarakat Sehat (JUKMAS). JUKMAS. Hubungan Indeks Massa Tubuh, Aktivitas Fisik dan Asupan Makan Dengan Hipertensi Pada Lanjut Usia.

Perubahan fisik pada lansia dapat memicu penyakit tidak menular (PTM) dan degeneratif khususnya hipertensi. Penelitian kuantitatif dengan rancangan studi kasus kontrol ini bertujuan menjelaskan hubungan antara variabel Indeks Massa Tubuh, Aktivitas Fisik Dan Asupan Makan dengan hipertensi pada lansia. Sampel penelitian yakni lanjut usia di kelurahan Jatiwaringin, Kota Bekasi. Penelitian dilakukan pada bulan April – Mei 2024 pada berjumlah 126 responden terdiri dari 63 kasus dan 63 kontrol. Kriteria inklusi kelompok kasus adalah lansia yang berdomisili di satu RT 04 Kelurahan Jatiwaringin dan didiagnosis oleh tenaga medis (dokter) menderita hipertensi, sedangkan untuk kelompok Kontrol adalah lansia berdomisili di RT 004 Kelurahan Jatiwaringin lokasi yang sama, tidak memiliki riwayat hipertensi dan saat diteliti memiliki tekanan darah normal (sistolik

. Jurnal Kesehatan STIKes Sumber Waras. JKSW. Hubungan Aktivitas Fisik dengan Derajat Hipertensi pada Lansia.

Non-communicable diseases still contribute to the highest mortality rate in Indonesia, especially hypertension. One of the factors of hypertension is physical activity. WHO also estimates that 1 in 5 women worldwide have hypertension. This number is greater among men, which is 1 in 4 people (Ministry of Health of the Republic of Indonesia, 2023). The purpose of this study was to determine the degree of hypertension, determine physical activity, and analyze the relationship between physical activity and hypertension at the Kenanga Posbindu, Grogol Village. The population of this study was 55 respondents with hypertension. The sample of this study used a purposive sampling technique so that a sample of 34 respondents was obtained. The focus of this study was the incidence of hypertension and physical activity. The analysis used in this study was an analysis using SPSS with the Chi-Square test. The results of the analysis showed that Hypertension with Grade 2 was 52.9% higher than Hypertension with Grade 1, which was 47.1%. Physical activity 52.9% were quite active. There is a significant relationship between physical activity and hypertension ( $P$  value = 0.017). The conclusion of this study is that hypertension sufferers who do less physical activity have a 2.31 times greater chance of experiencing grade II hypertension when compared to hypertension sufferers who do light physical activity. This can be caused by other factors such as high physical stress, rest or other lifestyle factors.

. Jurnal Bakti untuk Negeri. JBN. PEMBERDAYAAN TANAMAN OBAT KELUARGA

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## (TOGA) UNTUK MENGATASI HIPERTENSI DAN KOLESTEROL DI DESA GUDANG HIRANG RT 07.

Family Medicinal Plants (TOGA) are plants that are very efficacious, especially in the health sector. Based on data collection on disease complaints experienced by the community in Gudang Hirang Village Rt 07, 50% stated that they had hypertension and 33% suffered from cholesterol. The purpose of this activity is to increase knowledge to the people of Gudang Hirang Village Rt 07 about the types of family medicinal plants that can be used to control hypertension and cholesterol. The cadre of TOGA planting was carried out to the community by using ginger and celery plants. Ginger plants have many benefits, especially overcoming hypertension and strengthening the human immune system. While celery can be efficacious as a cholesterol treatment because it can reduce total cholesterol levels in hypercholesterolemia. The method used is a direct training method where the target is community representatives of Gudang Hirang Village Rt 07. The results of the activity show very high enthusiasm of cadres in increasing knowledge about the treatment of hypertension and cholesterol using medicinal plants ginger and celery. Thus, it is hoped that the education provided can be applied as an alternative to overcome public health problems.

. Al-Asalmiya Nursing: Jurnal Ilmu Keperawatan (Journal of Nursing Sciences).  
keperawatan. PENGARUH AKTIVITAS FISIK JALAN PAGI TERHADAP  
PENURUNAN TEKANAN DARAH PADA LANSIA DENGAN HIPERTENSI DI  
PUSKESMAS PAUH PENGARUH AKTIVITAS FISIK JALAN PAGI TERHADAP  
PENURUNAN TEKANAN DARAH PADA LANSIA DENGAN HIPERTENSI DI  
PUSKESMAS PAUH.

Hipertensi adalah suatu keadaan dimana tekanan darah sistole dan diastole mengalami kenaikan yang melebihi batas normal. Di Sumatera Barat tahun 2020 kasus lansia dengan hipertensi telah mencapai 73.639 jiwa, Puskesmas Pauh merupakan urutan ke 3 penderita hipertensi terbanyak dari 23 puskesmas yang ada di Kota Padang. Tujuan penelitian ini adalah untuk mengetahui Pengaruh Aktivitas Fisik Jalan Pagi Terhadap Penurunan Tekanan Darah Pada Lansia Dengan Hipertensi di Puskesmas Pauh Padang. Jenis Penelitian ini Quasi Experimental dengan rancangan penelitian (One Group Pretest-Posttest Design). Penelitian dilakukan di Puskesmas Pauh Padang dari bulan Maret sampai Agustus 2021.

Populasi pada penelitian ini berjumlah 5.184 jiwa dengan sampel sebanyak 10 orang yang diambil dengan Accidental Sampling dalam waktu 1 minggu. Data diolah dengan komputerisasi yang dianalisa secara univariat dan bivariat dengan uji Paired T-Test. Hasil penelitian ini menunjukan sebelum dilakukan aktivitas fisik jalan pagi, rata-rata tekanan darah responden sistole 145 mmHg sedangkan diastole 90 mmHg. Sesudah dilakukan aktivitas fisik jalan pagi penurunan tekanan darah sistole 5-15 mmHg dan diastole 5-10 mmHg. Dan hasil uji Paired-Test menunjukan bahwa terdapat pengaruh aktivitas fisik terhadap penurunan tekanan darah sistolik dan diastolik dengan Pvalue 0,000 sistole dan Pvalue 0,003 diastole . Kesimpulan dari penelitian ini adalah jalan pagi selama 30 menit dengan frekuensi 3 kali dalam seminggu berpengaruh terhadap menurunya tekanan darah sistolik dan diastolik pada lansia hipertensi. Peneliti berharap agar petugas kesehatan di Puskesmas Pauh dapat menerapkan aktivitas fisik jalan pagi kepada lansia dengan hipertensi untuk menurunkan tekanan darah.Hipertensi adalah suatu keadaan dimana tekanan darah sistole dan diastole mengalami kenaikan yang melebihi batas normal. Di Sumatera Barat tahun 2020 kasus lansia dengan hipertensi telah mencapai 73.639 jiwa, Puskesmas Pauh merupakan urutan ke 3 penderita hipertensi terbanyak dari 23 puskesmas yang ada di Kota Padang. Tujuan penelitian ini adalah untuk mengetahui Pengaruh Aktivitas Fisik Jalan Pagi Terhadap Penurunan Tekanan Darah Pada Lansia Dengan Hipertensi di Puskesmas Pauh Padang. Jenis Penelitian ini Quasi Experimental dengan rancangan penelitian (One GroupPretest-Posttest Design). Penelitian dilakukan di Puskesmas Pauh Padang dari bulan Maret sampai Agustus 2021. Populasi pada penelitian ini berjumlah 5.184 jiwa dengan sampel sebanyak 10 orang yang diambil dengan Accidental Sampling dalam waktu 1 minggu. Data diolah dengan komputerisasi yang dianalisa secara univariat dan bivariat dengan uji Paired T-Test. Hasil penelitian ini menunjukan sebelum dilakukan aktivitas fisik jalan pagi, rata-rata tekanan darah responden sistole 145 mmHg sedangkan diastole 90 mmHg. Sesudah dilakukan aktivitas fisik jalan pagi penurunan tekanan darah sistole 5-15 mmHg dan diastole 5-10 mmHg. Dan hasil uji Paired-Test menunjukan bahwa terdapat pengaruh aktivitas fisik terhadap penurunan tekanan darah sistolik dan diastolik dengan Pvalue 0,000 sistole dan Pvalue 0,003 diastole . Kesimpulan dari penelitian ini adalah jalan pagi selama 30 menit dengan frekuensi 3 kali dalam seminggu berpengaruh terhadap menurunya tekanan darah sistolik dan diastolik pada lansia hipertensi. Peneliti berharap agar

petugas kesehatan di Puskesmas Pauh dapat menerapkan aktivitas fisik jalan pagi kepada lansia dengan hipertensi untuk menurunkan tekanan darah.

. JURNAL MEDIKA USADA. medikausada. Hubungan Kualitas Tidur Dan Aktivitas Fisik Dengan Kategori Hipertensi Pada Pasien Hipertensi Di Wilayah Puskesmas Cilacap Utara 2.

Factors that cause hypertension include poor sleep quality and lack of physical activity. This study aims to determine the relationship between sleep quality and physical activity with hypertension category of hypertension patients in the work area of North Cilacap 2 Community Health Centre. This type of quantitative research with cross sectional design using rank spearman statistical test. Measurement of sleep quality with the Pittsburgh Sleep Quality Index questionnaire (PSQI). Physical Activity with the Physical Activity Level questionnaire (PAL). The results of the univariate analysis showed that poor sleep quality was 69 people (83,1). Physical activity very mild was 26 people (31,3%). The category of hypertension with grade 1 hypertension was 46 people (55,4%). The result of the bivariate analysis using the rank spearman test showed that there was a relationship between sleep quality and hypertension category of hypertension patients in the work area of North Cilacap 2 Community health centre ( $p_v = 0.008$ ;  $r = 0,289$ ). The result of the bivariate analysis using the rank spearman test showed that there was a relationship between physical activity and hypertension category of hypertension patients in the work area of North Cilacap 2 Community Health Centre ( $p_v = 0.02$ ;  $r = 0,253$ ).

. JURNAL KEPERAWATAN SUAKA INSAN (JKSI). JKSI. AKTIVITAS FISIK, KEBIASAAN MEROKOK, DAN KONSUMSI KOPI DENGAN KEJADIAN HIPERTENSI DI KLINIK ASY-SYIFA DESA JANGGALAN KECAMATAN KOTA KABUPATEN KUDUS.

Hipertensi adalah kondisi medis yang ditandai dengan tekanan darah sistolik yang mencapai atau melebihi 140 mmHg dan/atau tekanan diastolik yang mencapai atau melebihi 90 mmHg. Kondisi ini sering disebut "Silent Killer" karena sering kali tidak menunjukkan gejala yang jelas, sehingga sulit untuk dideteksi. Penelitian ini menggunakan metode penelitian secara kuantitatif bertujuan untuk mengidentifikasi hubungan antara aktivitas fisik, kebiasaan merokok, dan konsumsi kopi dengan kejadian hipertensi di Klinik Asy-Syifa Kudus. Penelitian ini menggunakan desain cross sectional dengan 80 responden yang dipilih secara purposive. Data penelitian

berupa data kuantitatif yang dikumpulkan melalui kuesioner, yaitu Fagerstrom Test for Nicotine Dependence untuk kebiasaan merokok, International Physical Activity Questionnaire untuk aktivitas fisik, dan Caffeine Consumption Questionnaire untuk konsumsi kopi. Pengukuran hipertensi dilakukan dengan menggunakan tensiometer digital atau manual. Hasil analisis data dengan uji Spearman Rank menunjukkan adanya hubungan signifikan antara aktivitas fisik, kebiasaan merokok, dan konsumsi kopi dengan hipertensi ( $p < 0,05$ ).

. Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM). Creat J. Cumn Enga. Pengelolaan Aktivitas Fisik untuk Penurunan Tekanan Darah pada Penderita Hipertensi di Lembaga Pemasyarakatan Perempuan Kelas IIA Bandar Lampung. ABSTRAK Secara nasional hasil RISKESDAS 2018 menunjukkan bahwa prevalensi penduduk dengan tekanan darah tinggi sebesar 34,11%. Sedangkan di Provinsi Lampung 29, 94. Data di Bandar Lampung yang tercatat sebagai penderita hipertensi pada tahun 2020 mencapai 196.149 orang (23,6%). Penelitian ini bertujuan melakukan asuhan keperawatan komprehensif terhadap penderita hipertensi dengan melakukan pengelolaan aktivitas fisik di Lembaga Pemasyarakatan Perempuan Kelas IIA Bandar Lampung Tahun 2023. Jenis penelitian deskriptif dengan menggunakan metode pendekatan studi kasus. Subjek pada laporan asuhan keperawatan ini sebanyak 2 orang, Teknik pengambilan subjek studi kasus ini menggunakan teknik purposive sampling. Metode pengumpulan data dengan wawancara, observasi dan pemeriksaan fisik. Menilai tekanan darah menggunakan tensi meter air raksa. Pengkajian keperawatan dilakukan melalui wawancara, pemeriksaan fisik, observasi, dan studi dokumentasi untuk memperoleh data yang akurat, sehingga ditemukan data patologis pada kasus I dan kasus II yaitu kenaikan tekanan darah. Diagnosa keperawatan yang ditemukan pada kasus I dan II yaitu risiko penurunan curah jantung berhubungan dengan perubahan afterload vasokonstriksi dan nyeri akut berhubungan dengan peningkatan tekanan vascular cerebral dan iskemia. Intervensi Keperawatan dilakukan berdasarkan Standar Intervensi Keperawatan Indonesia menurut Tim Pokja SIKI DPP PPNI, 2018 dengan kriteria hasil berdasarkan Standar Luaran Keperawatan Indonesia Tim Pokja SLKI DPP PPNI, 2019. Hasil evaluasi diketahui senam hipertensi sangat efektif untuk menurunkan tekanan darah pada penderita hipertensi. Disarankan penderita hipertensi mampu melakukan perawatan secara mandiri terhadap penyakit yang

diderita seperti mengatur pola makan, diet serta pemeriksaan keelayanan kesehatan dan melakukan aktivitas fisik senam hipertensi secara taratur dan menjadikan senam hipertensi sebagai salah satu alternatif pengobatan non farmakologika dalam pengobatan hipertensi. Kata Kunci : Aktivitas Fisik, Hipertensi ABSTRAK Nationally the 2018 RISKESDAS results show that the prevalence of people with high blood pressure is 34.11%. Meanwhile in Lampung Province 29.94. Data in Bandar Lampung recorded as hypertension sufferers in 2020 reached 196,149 people (23.6%). This study aims to provide comprehensive nursing care for hypertensive patients by managing physical activity at the Class IIA Women's Correctional Institution in Bandar Lampung in 2023. This type of descriptive research uses a case study approach. Subjects in this sick care report were 2 people. The technique of taking the subject of this case study used a purposive sampling technique. Methods of data collection by interviews, observation and physical examination. Assess blood pressure using a mercury tension meter. The results of the research study of findings were carried out through interviews, physical examinations, observations, and documentation studies to obtain accurate data, so that pathological data were found in case I and case II, namely increased blood pressure. The diagnosis of involvement found in cases I and II is the risk of decreased cardiac output related to changes in afterload, vasoconstriction and acute pain associated with increased cerebral vascular pressure and ischemia. Nursing interventions were carried out based on the Indonesian Nursing Intervention Standards according to the SIKI Working Group Team DPP PPNI, 2018 with outcome criteria based on the Indonesian Nursing Outcome Standards DPP PPNI Working Group Team SLKI, 2019. The evaluation results found that hypertension exercise was very effective in reducing blood pressure in hypertension sufferers. It is recommended that hypertension sufferers be able to take care of their illness independently such as adjusting their diet, diet and health service checks and doing regular physical activity of hypertension gymnastics and making hypertension gymnastics an alternative non-pharmacological treatment in the treatment of hypertension. Keywords: Physical Activity, Hypertension

. Barigas: Jurnal Riset Mahasiswa. Barigas. Literature review : hubungan aktivitas fisik dengan kejadian hipertensi.

Hypertension, also known as high blood pressure, is a worldwide health issue. Hypertension is a condition in which the systolic and diastolic blood pressures rise above the usual limit. Lack of physical activity as a risk factor for hypertension needs more attention because this factor is a factor that can be modified with minimal effort and cost. Understanding the tendency of the relationship between physical activity and the incidence of hypertension. The literature review uses a systematic review approach, data sources, data sources from original articles in the Pubmed.gov and Google Scholar databases with the keywords relationship, physical activity, and hypertension. There were 21 journals that met the inclusion criteria and data quality analysis. Synthesis of data using the SPIDER method. Based on the results of a literature review it was found that in the twenty-four journals analyzed, there were 18 (86%) journals that stated they were related and 3 (14%) stated otherwise. Individuals with lower physical activity tend to have a higher risk of hypertension and the factors that influence it include diet, age, nutritional status, family history of hypertension, smoking to routine health checks.

. JURNAL MEDIA KESEHATAN. J.Medkes. HUBUNGAN AKTIVITAS FISIK DAN KUANTITAS TIDUR DENGAN KEJADIAN HIPERTENSI.

Hypertension is not a contagious disease that is a cause of death in the world .Approximately 17.5 million people worldwide die from hypertension . An estimated 2025cases of hypertension will be 1.6 billion cases of hypertension . The cause of hypertension is divided into two factors that can be controlled and uncontrolled . Controlled factors , among others, excessive salt intake , cholesterol , smoking , alcohol , physical activity , quantity of sleep , lifestyle , stress , and obesity . This study was to determine the relationship of physicalactivity and quantity of sleep with the incidence of hypertension in Puskesmas SukamerinduBengkulu .This type of research is the use of cross -sectional and sampling methodsperformed with accidental sampling technique . The number of samples of this study were 97respondents and data collection was done by questionnaire interview . This study analyzesusing univariate and bivariate analysis with the Chi - Square test statistic where the significantlevel  $p = 0.05$ The results of the study demonstrate a significant association between physicalactivity with incidence of hypertension with  $p = 0.00$  and a significant correlation with theincidence of sleep quantity with hypertension incidence with  $p = 0.00$  .PHC nurses expectedfurther improve the quality of health

services, especially in patients at risk for hypertension and preventive improvement can be done by preventing the increase in hypertension .

. Multilateral : Jurnal Pendidikan Jasmani dan Olahraga. Multilateral. Efektivitas aktivitas fisik pada lansia hipertensi yang obesitas. Jurnal Keperawatan 'Aisyiyah. Indonesia. j.keperawatan aisyiyah. AKTIVITAS FISIK PASIEN HIPERTENSI.

Aktivitas fisik termasuk manajemen nonfarmakologi yang dapat memengaruhi tekanandarah. Kurang aktivitas fisik menyebabkan tekanan darah selalu tinggi melebihi rentang nilai normal 130/90 mmHg, jika dalam waktu lama akan berisiko komplikasi. Tekanandarah penderita hipertensi minimal dapat dikendalikan dengan melakukan aktivitas fisik sehingga dapat mencegah komplikasi. Penelitian ini bertujuan untuk mengetahui bagaimana gambaran aktivitas fisik pasien hipertensi. Penelitian ini merupakan penelitian deskriptif kuantitatif. Sampel sebanyak 99 penderita hipertensi tanpa komplikasi, ditetapkan dengan cara purposive sampling. Pengumpulan data dilakukan dengan menggunakan kuesioner International Physical Activity Questionnaire (IPAC) yang merupakan kuesioner baku dengan 27 pertanyaan dan nilai uji validitas r hitung (0,444) > r tabel (0,361) serta Cronbach alpha 0,713 menyatakan reabilitas. Hasil penelitian dan analisis menggunakan analisa univariat, disajikan dalam bentuk tabel distribusi frekuensi. Hasil penelitian menunjukkan sebagian besar responden melakukan aktivitas fisik sedang dengan persentase (62,6%). Responden yang termasuk aktivitas fisik berat (28,3%), dan sebagian kecil termasuk aktivitas fisik ringan (9,1%). Aktivitas fisik berada pada kategori sedang dan berat tetapi masih ada sebagian kecil yang termasuk aktivitas fisik ringan. Hal ini perlu dilakukan pembinaan lebih lanjut oleh pihak puskesmas seperti meningkatkan Program Posbindu melalui penyuluhan, pelaksanaan aktivitas fisik khusus penderita hipertensi.

. Jurnal Keperawatan Silampari. JKS. Latihan Aktivitas Fisik Seperti Berjalan Setiap Hari pada Pasien Hipertensi.

This study aims to determine the effect of walking physical activity on blood pressure in hypertension patients. This type of research is a systematic review, by reviewing several journals from the University of Indonesia library through CINAHL, Pubmed, Ebscohost, Springer, Wiley, and Scopus. The results of research from 11 literature searches that walking activity exercises can effectively reduce blood pressure levels, ranging from 6 minutes to 120 minutes per day, and 1200 minutes every week, can

produce a better effect in hypertensive patients - the average decrease in SBP is significant between 2.6 mmHg and 22.6 mmHg. In conclusion, walking activity exercises are very useful and effective in reducing blood pressure levels, especially in hypertensive patients. Keywords: Physical Activity, Walking, Hypertension, Brisk Walking, Jogging

. Jurnal Keperawatan Widya Gantari Indonesia. JKWI. Tingkat Aktivitas Fisik berhubungan dengan Derajat Tekanan Darah Pada Pasien Hipertensi.

Hipertensi adalah tekanan darah yang melebihi batas normal yang mana terdapat gangguan pada sistolik  $> 140$  mmHg dan diastolik  $> 90$  mmHg saat dilakukan pemeriksaan secara berulang. Hipertensi merupakan penyakit tidak menular yang masih banyak terjadi dan termasuk penyakit degeneratif serta memiliki tingkat mortalitas yang cukup tinggi. Penanganan hipertensi supaya tekanan darah menurun seperti melakukan aktivitas fisik. Aktivitas fisik dapat dilakukan dimana saja untuk mengisi waktu luang. Tujuan penelitian untuk menganalisis hubungan tingkat aktivitas fisik dengan derajat tekanan darah pada pasien hipertensi di UPTD Puskesmas Bintara Kota Bekasi. Metode penelitian menggunakan desain deskriptif korelasional dengan pendekatan cross sectional. Pengambilan sampel dengan teknik probability sampling dan terdapat 99 responden. Hasil penelitian menunjukkan mayoritas tingkat aktivitas fisik sedang sebanyak 70 responden (70,7%) dan derajat tekanan darah dalam kategori normal sebanyak 52 responden (52,5%). Hasil uji menggunakan chi-square didapat nilai  $p$ -value=0,0001. Kesimpulannya bahwa ada hubungan yang signifikan antara tingkat aktivitas fisik dengan derajat tekanan darah pada pasien hipertensi di UPTD Puskesmas Bintara Kota Bekasi. Keywords: aktivitas fisik, tekanan darah, hipertensi

. Jurnal Nurse. Nurse. Tren Riset Penatalaksanaan Berbasis Terapi Komplementer Aktivitas Fisik Pada Hipertensi: Analisis Bibliometrik.

Terapi komplementer aktivitas fisik pada hipertensi diperlukan karena hipertensi merupakan masalah kesehatan yang cukup banyak dijumpai di masyarakat dan bisa menimbulkan komplikasi yang dapat menyebabkan kerusakan pada organ. Tujuan dari penulisan artikel ini adalah mengetahui analisis bibliometrik untuk penelitian yang terkait dengan terapi komplementer aktifitas fisik pada pasien Hipertensi. Pencarian online dimulai dengan menggunakan kata kunci berikut “Terapi komplementer aktifitas fisik untuk tekanan darah Hipertensi” dalam rentang tahun

2017-2022. Hasil analisis didapatkan 402 artikel dari tahun 2017-2022. Jumlah sitasi total dalam penelitian ini meliputi 660 sitasi. Untuk jumlah rata-rata sitasi pertahun menunjukkan jumlah sitasi per tahun 132 artikel. Cluster pertama menunjukkan terdapat 4 item yang meliputi alternative therapy, complementary, elderly dan non pharmacology therapy. Cluster kedua meliputi 4 item yang terdiri dari acupressure, complementary therapy, hypertension dan lower blood pressure. Cluster ke 3 meliputi 4 item yang meliputi blood pressure, hypertension patient, music therapy dan progressive muscle relaxation. Cluster ke 4 meliputi 4 item yang meliputi hipertensi, Indonesia, massage dan physical therapy. Terapi komplementer berbasis aktivitas fisik yang ditemukan misalnya adalah latihan aerobik (berjalan, berlari, bersepeda, atau berenang), Yoga, Latihan kekuatan, Latihan relaksasi otot progresif, accupresure, dan terapi musik. Analisis bibliometrik pada terapi komplementer aktivitas fisik pada hipertensi dapat memberikan informasi yang berguna untuk mengevaluasi tingkat produktivitas, kualitas, dan kontribusi penelitian dalam bidang ini dan membantu dalam menentukan arah dan tren penelitian selanjutnya.

*yamaha dt 50 service manual chapter enlightenment and revolution test answers  
industrial gas compressor guide compair 5 nf 6 worksheets common core sheets  
corporate finance a focused approach 5th edition*

## **YAMAHA DT 50 SERVICE MANUAL**

**Yamaha DT 50 Service Manual: Essential Guide to Maintaining Your Ride**

**What is a Yamaha DT 50 Service Manual?**

A Yamaha DT 50 Service Manual is a comprehensive guide that provides detailed instructions on maintaining and repairing your Yamaha DT 50 motorcycle. It covers everything from routine maintenance procedures to major repairs, helping you keep your bike in top condition.

**Why is a Service Manual Important?**

Referencing a service manual is crucial for ensuring your Yamaha DT 50 runs smoothly and safely. It provides factory-approved specifications, torque values, and step-by-step procedures, ensuring you perform tasks correctly and avoid costly mistakes.

### **What Information is Included in a Service Manual?**

Yamaha DT 50 Service Manuals typically include sections on:

- **Maintenance:** Instructions for regular tasks such as oil changes, filter replacements, and brake adjustments
- **Troubleshooting:** Diagnosis and repair procedures for common problems
- **Electrical:** Wiring diagrams, electrical component testing, and repair guidelines
- **Engine:** Cylinder head removal, valve adjustments, and major engine repairs
- **Frame and Suspension:** Disassembly, inspection, and reassembly techniques

### **Where Can I Find a Service Manual?**

Yamaha DT 50 Service Manuals can be purchased online from authorized Yamaha dealers or through third-party retailers. They may also be available at local motorcycle shops or libraries.

### **Conclusion:**

Investing in a Yamaha DT 50 Service Manual is an essential tool for keeping your motorcycle in optimal condition. By following the detailed instructions provided, you can perform maintenance and repairs with confidence, saving money and ensuring the longevity of your ride.

## **CHAPTER ENLIGHTENMENT AND REVOLUTION** **TEST ANSWERS**

**What was the Enlightenment answers?** The Enlightenment, also known as the Age of Reason, was a philosophical movement in Europe during the 17th and 18th centuries. At its core was a belief in the use and celebration of reason, the power by which humans understand the universe and improve their own condition.

**What was one idea that the leaders of the American Revolution shared with Enlightenment thinkers?** Natural Rights. Natural rights, as explained by John Locke, greatly influenced both of these revolutions. In America, the Declaration of Independence drew heavily from John Locke, most notably the famous phrase, "life, liberty and happiness." Natural rights are also guaranteed in the Bill of Rights.

**Which Enlightenment thinker proposed that the best way to protect liberty was to separate the government's power into three branches?** The term "Separation of Powers" was coined by the 18th century philosopher Montesquieu. Separation of powers is a model that divides the government into separate branches, each of which has separate and independent powers.

**How did the Enlightenment influence revolutionary thought?** The Enlightenment gave Americans the ideas that fueled the American Revolution, especially those found in the philosophies of classical conservatism, Lockean liberalism, and deism. The focus on reason and logic highlighted the belief in human rights and the advocacy against the divine right of kings.

**What was the Enlightenment Quizlet answers?** The enlightenment was a time in the 1700's in Europe when people began to question old ideas and search for knowledge. The name Enlightenment refers to the light of knowledge that supposedly replaces the darkness of superstition and ignorance.

**What were the 3 key points of the Enlightenment?** The Enlightenment, sometimes called the 'Age of Enlightenment', was a late 17th- and 18th-century intellectual movement emphasizing reason, individualism, and skepticism. The Enlightenment presented a challenge to traditional religious views.

**What were the two major beliefs of the Enlightenment?** A variety of 19th-century movements, including liberalism, socialism, and neoclassicism, trace their intellectual heritage to the Enlightenment. The central doctrines of the Enlightenment were

individual liberty and religious tolerance, in opposition to an absolute monarchy and the power of religious authorities.

**What were four causes of the French Revolution?** This Revolution would eventually result in the death of the king, his wife, and countless others. The causes of the French Revolution can be narrowed to five main factors: the Estate System, absolutism, Enlightenment ideas, food shortages, and the American Revolution.

**What age was the Enlightenment?** Historians place the Enlightenment in Europe (with a strong emphasis on France) during the late 17th and the 18th centuries, or, more comprehensively, between the Glorious Revolution in 1688 and the French Revolution of 1789.

**What type of government did most of the Enlightenment thinkers want why?** Notably, few Enlightenment thinkers called for democracy as people understand the term today. Many intellectuals such as Voltaire believed that monarchy was the best way to advance social, political, and economic goals. However, the idea that citizens could hold their leaders accountable was revolutionary.

**Which founding document reflects the American colonists' fear of a strong central government?** The Declaration and Bill of Rights reflect a fear of an overly centralized government imposing its will on the people of the states; the Constitution was designed to empower the central government to preserve the blessings of liberty for "We the People of the United States." In this sense, the Declaration and Bill of ...

**Who created the separation of powers?** The term "trias politica" or "separation of powers" was coined by Charles-Louis de Secondat, baron de La Brède et de Montesquieu, an 18th century French social and political philosopher.

**Which Enlightenment philosopher had the most direct impact on the American founders?** Explanation: The single most important influence that shaped the founding of the United States comes from John Locke, a 17th century Englishman who redefined the nature of government.

**Which idea was supported by the majority of thinkers during the Enlightenment period?** The Enlightenment, a philosophical movement that dominated in Europe during the 18th century, was centered around the idea that

reason is the primary source of authority and legitimacy, and advocated such ideals as liberty, progress, tolerance, fraternity, constitutional government, and separation of church and state.

**Why did the Enlightenment and Revolution seem to go together so well?**

Summary: Enlightenment ideals of rationalism and intellectual and religious freedom pervaded the American colonial religious landscape, and these values were instrumental in the American Revolution and the creation of a nation without an established religion.

**What are the main ideas of thought and the main emphasis of Enlightenment thinkers?** It was thought during the Enlightenment that human reasoning could discover truths about the world, religion, and politics and could be used to improve the lives of humankind. Skepticism about received wisdom was another important idea; everything was to be subjected to testing and rational analysis.

**What did Enlightenment thinkers set out to achieve?** Enlightenment thinkers in Britain, in France and throughout Europe questioned traditional authority and embraced the notion that humanity could be improved through rational change. The Enlightenment produced numerous books, essays, inventions, scientific discoveries, laws, wars and revolutions.

**What contributions did John Locke make to the Enlightenment?** John Locke's philosophy inspired and reflected Enlightenment values in its recognition of the rights and equality of individuals, its criticism of arbitrary authority (e.g., the divine right of kings), its advocacy of religious toleration, and its general empirical and scientific temperament.

**What exactly is the Enlightenment?** 1. : the act or means of enlightening : the state of being enlightened. 2. capitalized : a philosophical movement of the 18th century marked by a rejection of traditional social, religious, and political ideas and an emphasis on rationalism.

**What was the Enlightenment in response to?** Enlightenment era religious commentary was a response to the preceding century of religious conflict in Europe, especially the Thirty Years' War.

**What do you mean by Enlightenment answer?** Britannica Dictionary definition of ENLIGHTENMENT. [noncount] 1. : the state of having knowledge or understanding.

**What was the main goal of the Enlightenment?** The main goal of the wide-ranging intellectual movement called the Enlightenment was to understand the natural world and humankind's place in it solely on the basis of reason.

## **INDUSTRIAL GAS COMPRESSOR GUIDE COMPAIR**

Aircraft Engineering and Aerospace Technology. Aircraft Eng & Aerospace Tech. CompAir supplies 'Change of Heart' scheme compressor to research institute. An industrial Gas Turbine/Compressor package designed for rapid installation and commissioning. On the Prediction of Rotating Stall in an Industrial Gas Turbine Compressor. Vacuum. Vacuum. CompAir Maxam connectors. Volume 5: Manufacturing Materials and Metallurgy; Ceramics; Structures and Dynamics; Controls, Diagnostics and Instrumentation; Education. Effects of Variable Inlet Guide Vane Settings on Axial Compressor Blade Vibration in an Industrial Gas Turbine. This paper describes an experiment on a GHH BORSIG Type THM 1304-10 Gas Turbine engine to test the effects of variable vane setting on the vibration behaviour of the blades in all 10 stages of the axial compressor. The rotor was fitted with a network of strain-gauges. An analogue telemetry system was arranged using standard hardware and special application software to display in real-time and to log the full range of frequencies and amplitudes for all instrumented blades. The data acquisition system is described together with a presentation of the live display which allowed engineers to interact with measured results to maximise the benefits of the test whilst all strain-gauges were still functional. Tests were arranged to maximise the vibration data collected at all points before gauge mortality was experienced. Prior to the test, blades were vibrated statically to determine shapes of the first four vibration modes. The paper discusses the fixing techniques for the gauges, the modal shape measurement technique and the calibration of the strain-gauges. The telemetry system architecture and multiplexing arrangement are described together with examples of typical test data and the conclusions concerning the effects on blade vibration of different variable inlet guide vanes (IGV) settings.

. Frontiers in Mechanical Engineering. Front. Mech. Eng.. Model-based performance study of an industrial single spool gas turbine 9EA-GT by changing the inlet guide AKTIVITAS FISIK UNTUK MENGATASI HIPERTENSI

vane angle and modifying the compressor map.

In this article, an industrial gas turbine engine with a single spool (single spool 9EA-GT) is discussed, and a thermodynamic model for computing steady-state performance is presented. In addition, a novel component map production method for investigating a gas turbine engine (GTE) is developed for a different compressor and turbine by downloading from the GasTurb 12 tool and scaling to the compressor and turbine's design points. A system of controlling engine flow capacitance by changing inlet guide vanes (IGVs) is presented. Adjusting the controllable IGV blades can optimize all the engine units by continuously correcting the compressor features map. The airflow via the compressor, which in turn controls the airflow throughout the entire system, is managed by IGVs. The computations for steady-state performance involve two models: steady-state behavior at engine startup (from 65% to 100% speed, without load) and steady-state behavior while loading (continuous speed of 100%). In this model, the challenges brought by the lack of understanding of stage-by-stage performance are resolved by building artificial machine maps using suitable scaling methods to generalized maps derived from the previous research and validating them with experimental observations from real power plants. The engine performance simulation utilizing the maps is carried out using MATLAB. Assessment results are found to be in good agreement with the actual performance data. During a steady start, the control system used in this study decreased the fuel consumption, exhaust gas mass flow rate, and compressor-driven power for the GTE by 9.5%, 19.3%, and 37.5%, respectively, and those variables decreased by 1%, 12.2%, and 19.7%, respectively, when loading the engine.

. Volume 2E: Turbomachinery. On the Prediction of Rotating Stall in an Industrial Gas Turbine Compressor.

An investigation is presented into the computation of rotating stall in an industrial gas turbine compressor using a hybrid whole annulus and single passage computational domain. The objective of this investigation is to demonstrate the use of large-scale unsteady computations with quicker turn-around times in the design cycle to develop and evaluate several variable guide vane schedules and/or bleed settings. This means that subsequent engine test campaign could be carried out with significantly lower test matrix size in terms of the number of variable guide vane schedules and/or

the handling bleed settings thus reducing the overall development time and cost. Rotating stall that was measured and characterised during a previous compressor rig test (Krishnababu, et al. [1]) were successfully predicted by large-scale unsteady computations using TurboStream. The predicted number of stall cells and their speed agreed closely with the test data. The methodology validated was applied to predict and mitigate the rotating stall in the development of a compressor for a new gas turbine engine. Using this approach, it was possible to define bleed control system that ensured stall free operation.

. Volume 4: Heat Transfer; Electric Power; Industrial and Cogeneration. Compressor Redesign for the CW251B12 Gas Turbine.

The different aspects of the CW251B12 compressor redesign intended for possible upgrading of currently installed B10 engines and for the B12 model are described in this paper. The design philosophy is based upon experience with previous compressor upratings. Aerodynamic and mechanical considerations as well as description of the new features introduced into the redesigned compressor are included in the paper. Generalized compressor design rules are also presented.

. Applied Industrial Hygiene. Applied Industrial Hygiene. Recommending a Ventilation Rate for Gas Compressor Buildings. Volume 1: Turbomachinery. The Development of a Multi-Stage Heavy-Duty Transonic Compressor for Industrial Gas Turbines.

The decision was made to use a heavy-duty, 12-stage transonic compressor for the new Type 8 Brown Boveri gas turbine.

With this advanced concept, it became possible both to increase the pressure ratio to 16:1 and to reduce the number of stages by half. The wide-chord, low aspect-ratio blade design brought about a further decrease in the total number of components and a reduction of the mechanical stresses. A variable inlet guide vane was added to provide flexibility in combined cycle operation.

Appropriate computer-assisted design systems were developed for evaluation of design and off-design aerodynamics.

As a back-up for the design work, tests were run on several model compressors to explore and study aerodynamic and mechanical behavior. Detailed field

measurements were also taken on the prototype units of the Type 8 as a final check to confirm the expected values.

. International Journal of Refrigeration. International Journal of Refrigeration. A breath of fresh air. Volume 3: Heat Transfer; Electric Power; Industrial and Cogeneration. Compressor Discharge Brush Seal for Gas Turbine Model 7EA. Single shaft-heavy-duty- industrial gas turbines are extremely sensitive to compressed air bypassing at compressor discharge plane. This plane represents the highest pressure location in entire Gas Turbine Unit (GTU). Standard method to minimize compressed air leakage is labyrinth seal that is integral part of the cylindrical element here called “inner barrel”. The “inner barrel” is also the part of compressor discharge diffuser. This Paper describes the efforts related to conversion of standard labyrinth seal into the hybrid seal that is combination of labyrinth and brush seals.

. ASME 2015 Gas Turbine India Conference. Numerical Study of Variable Camber Inlet Guide Vane on Low Speed Axial Compressor.

The modern engine has the requirement of high pressure ratio compressors. High diffusion blades are used to cater to this requirement. The high diffusion blades suffer from the low incidence range. A variable geometry inlet guide vane is used to improve the incidence range and to have an increased stable operating range.

In this paper a variable camber inlet guide is proposed in place of an existing inlet guide vane (IGV) to operate the compressor at increased stable operating range or to operate at improved efficiency at off design point. Numerical analysis is carried out in ANSYS CFX©. The existing compressor consists of IGV (20 blades) , rotor (43 blades) and stator (52 blades). The rotor rotates at 2400 rpm in clockwise direction.

The IGV blade is split two part forward blade and aft blade. Numerical studies are conducted to study the effect of varying the stagger angle on the performance of the compressor. The aft blade is given rotation in clockwise direction for +5° and +10°. The numerical results obtained are compared to the same stagger angle with full blades. It is observed that marginal improvement in the pressure ratio and efficiency. 7% stall margin improvement is achieved with slotted blade in place a fixed IGV at 0° setting angle. A new compressor characteristics is estimated which shows that the compressor can be operated to the left of the fixed-IGV-stage peak pressure with

high efficiency.

. Volume 2: Turbo Expo 2003. Flexible Spacers Compressor Stator Blades for Heavy Industrial Gas Turbines Model 7EA.

This paper describes efforts to upgrade the mechanical integrity of axial compressor stator blades. The blades under discussion are part of an axial compressor of a heavy duty industrial Combustion Gas Turbine (CGT) made by GE, frame No. 7, model EA. The axial compressor stator blades, in the later stages of compression, are kept in required position by spacers or shims shaped to match the root profile of the blades. These spacers/shims may be as thick as 1/4 of an inch and as thin as 1/32 of an inch. These spacers/shims tend to wiggle out of the slots and eventually liberate themselves from the stator. This paper introduces a proposed solution to minimize liberation of the spacer/shims by introduction of flexible spacers/shims. This paper also describes field experience with loss of the stator blades in the last stage of compression, due to aerodynamic disturbances.

. Advanced industrial gas turbine technology readiness demonstration program.

Phase II. Final report: compressor rig fabrication assembly and test. Investigation of Wash Fluid Preheating on the Effectiveness of Online Compressor Washing in Industrial Gas Turbines.

This study presents an investigation of wash fluid preheating on the effectiveness of online compressor washing in industrial gas turbines. Crude oil was uniformly applied on the compressor cascade blades surfaces using a roller brush, and carborundum particles were ingested into the tunnel to create accelerated fouled blades. Demineralized water was preheated to 50<sup>0</sup>C using the heat coil provided in the tank. When fouled blades washed with preheated demineralized and the one without preheating were compared, it was observed that there was little or no difference in terms of total pressure loss coefficient and exit flow angle. However, when the fouled and washed cases were compared, there was a significant different in total pressure loss coefficient and exit flow angle.

. Volume 4: Heat Transfer; Electric Power; Industrial and Cogeneration. Field Evaluation of On-Line Compressor Cleaning in Heavy Duty Industrial Gas Turbines. On-line compressor cleaning of heavy duty gas turbines in industrial cogeneration service has proven to be a cost effective method of reducing the rate of performance

loss associated with compressor fouling. By selecting an injection system, and by varying the dosage, frequency, and cleaning products used, an optimum cost effective method can be achieved. This paper evaluates the online compressor cleaning system at two 300 Mw cogeneration plants (8 gas turbines) that have been using this system since 1986.

. Volume 9: Oil and Gas Applications; Supercritical CO<sub>2</sub> Power Cycles; Wind Energy. Variable Inlet Guide Vane Effect on Centrifugal Compressor Performance in Wet Gas Flow.

The introduction of variable inlet guide vanes (VIGVs) upfront of a compressor stage affects performance and permits tuning for off-design conditions. This is of great interest for emerging technology related to subsea compression. Unprocessed gas from the wellhead will contain liquid condensate, which affects the operational condition of the compressor. To investigate the effect of guide vanes on volume flow and pressure ratio in a wet gas compressor, VIGVs are implemented upfront of a centrifugal compressor stage to control the inlet flow direction. The guide vane geometry and test rig setup have previous been presented. This paper documents how changing the VIGV setting affects compressor performance under dry and wet operating conditions. The reduced performance effect and operating range at increased liquid content are of specific interest. Also documented is the change in the VIGV effect relative to the setting angle.

. Volume 4: Heat Transfer; Electric Power; Industrial and Cogeneration. Gas Turbine Compressor Washing State of the Art — Field Experiences.

Technology development in gas turbine compressor washing over the last 10 years and today's state of the art technology is presented in this paper. Based on various long term field tests and observations, correlation between rate of power degradation and atmospheric conditions can be established. Questions about compressor on line washing with water alone against the use of detergents, as well as washing frequencies are also addressed in this paper. Performance degradation behavior between gas turbines of different sizes and models can be explained with an index of sensitivity to fouling. The implementation of an optimised regime, of on line and off line washing in the preventive turbine maintenance program is important, it will improve the plant profitability by reducing the costs of energy production and contribute to a cleaner environment.

. Day 3 Wed, November 09, 2016. Industrial Power Augmentation Technologies for Aero-Derivatives GT Used as Natural Gas Compressor Drives.

Gas Turbines are widely used for Mechanical Drive applications, especially compressor drive for LNG Plants. Aero-derivative turbines are increasingly used for this application as they offer many advantages in terms of superior efficiency and fast start up and reaction to changing demand. However, aero-derivative turbine are highly ambient dependent. When the weather gets hot, gas turbines lose up to 20-40 percent of power output and consequently the production of the LNG plant decreases. Efficiency also decreases when the ambient temperature is higher.

The high ambient dependency of aero-derivative turbines has been the main drawback of this technology in very hot climates. Turbine inlet air cooling (TIAC) has been proven to be the solution for this challenge, especially in Middle East. The technical background behind this phenomenon is that aero-derivative turbines have a fixed volumetric inlet air flow. When the ambient air temperature increases the density of the air decreases and therefore the inlet mass flow decreases accordingly. As the power output of the gas turbine is proportional to the inlet air mass flow, for higher temperatures the output will be lower. With TIAC technologies, the inlet air is cooled to avoid the problem of high temperature and low density.

TIAC has been implemented in the power sector as a cost efficient power augmentation solution for more than 25 years but it is not common for gas turbines used in Oil & Gas fields because of two main reasons: ?For the last years, Oil & Gas market was not so much concerned about cost?Standard chillers are not able to comply with the high requirements of the Oil & Gas Industry

However, the falls in oil price are forcing the industry to find solutions for capital cost reduction, which together with the state-of-the-art TIAC technologies characterized for using API standard industrial compressors, is recently turning TIAC a cost effective needed technology in the Oil & Gas sector. Initial examples include the last greenfield developments made by Saudi Aramco and Gazprom in which TIAC technologies has been considered and successfully implemented to reduce the overall capital cost.

After several years of successful operation and data collection, the results of the TIAC system implemented in three LM6000-PC located in the North of Mexico will be presented. The power output and heat rates were measured with and without cooling, and the CAPEX and OPEX was evaluated and compared with the installation of a new gas turbine. Based on those results, it is found that capital and operation cost is significantly reduced with TIAC for aero-derivative turbines at Oil & Gas fields.

## **5 NF 6 WORKSHEETS COMMON CORE SHEETS**

Understanding Mathematical Standards and Finding Free Worksheets\*\*

### **What is NF 6?**

NF 6, or Number and Operations with Fractions, Grade 6, is a set of Common Core State Standards that outline the mathematical concepts and skills that students in sixth grade should master.

### **What are NF Standards For?**

NF standards encompass the understanding and application of fractions, decimal numbers, and equivalent expressions. They cover concepts such as simplifying fractions, comparing and ordering fractions, adding and subtracting fractions with unlike denominators, multiplying and dividing fractions, and converting between fractions and decimals.

### **Where Can I Get Free Math Worksheets?**

Various online platforms offer free math worksheets, including:

- Education.com
- Khan Academy
- IXL Learning
- Math Playground

### **How to Find Math Worksheets Online?**

To find math worksheets online:

- Use search engines like Google or Bing with keywords like "free math worksheets grade 6" or "NF 6 worksheets."
- Visit websites dedicated to providing educational resources, such as Teachers Pay Teachers or Curriculum Monkey.
- Explore educational apps like Khan Academy Kids or IXL Learning, which offer interactive worksheets and exercises.

### **What is the Best Math Website for Free?**

- Khan Academy: Provides video lessons, exercises, and free worksheets in various math subjects, including NF 6.
- IXL Learning: Offers interactive math practice with personalized learning paths and printable worksheets.

### **Does IXL Do Worksheets?**

Yes, IXL Learning provides printable worksheets along with its interactive practice exercises.

### **What is 5 NF Also Known As?**

5 NF is also known as Number and Operations with Fractions, Grade 5.

### **What Does NF Grade Stand For?**

NF stands for Number and Operations with Fractions.

### **What is NF-7?**

NF-7 is a set of Common Core State Standards for Number and Operations with Fractions, Grade 7.

### **Is NF Food Grade?**

NF is not a food grade or certification.

### **What Does NF Certified Mean?**

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NF certified is a mark used by certain industries, such as the lighting industry, to indicate that a product meets specific performance and quality standards.

### **What are NF Types?**

The term "NF types" is not commonly used.

### **What is Standard 5 NBT 5?**

NBT 5, or Number and Operations in Base Ten, Grade 5, is a set of Common Core State Standards that focus on understanding and applying place value and operations with whole numbers.

### **What is the ANSI ITSDF b56 6 Standard?**

ANSI ITSDF b56.6 is a standard related to the design of nuclear power plants and their fuel handling systems.

### **What is 5 nf 7?**

5 nf 7 refers to Number and Operations with Fractions, Grade 5, Lesson 7.

### **What is the Standard for 5 NF 2?**

5 NF 2, or Number and Operations with Fractions, Grade 5, Standard 2, addresses the concept of comparing two fractions with different numerators and different denominators.

## **CORPORATE FINANCE A FOCUSED APPROACH** **5TH EDITION**

**What is the main focus of corporate finance?** Its primary goal is to maximize shareholder value while striking a balance between risk and profitability. It entails long- and short-term financial planning and implementing various strategies, capital investment, and tax considerations.

**What are the five basic corporate finance functions?** The five basic corporate functions are financing (or capital raising), capital budgeting, financial management,

corporate governance, and risk management. These functions are all related, for example, a company needs financing to fund its capital budgeting choices.

**How to get into corporate finance?** How to start a career in Corporate Finance. While there is no single path to enter into the field of corporate finance, previous experience is generally required. This is why many applicants will first begin by qualifying as an accountant, working in investment banking or equity research before transferring over.

**What is the difference between finance and corporate finance?** Corporate finance involves managing assets, liabilities, revenues, and debts for businesses. Personal finance defines all financial decisions and activities of an individual or household, including budgeting, insurance, mortgage planning, savings, and retirement planning.

**What are the three pillars of corporate finance?** Corporate finance has three main areas: capital budgeting, capital financing, and working capital management. Capital budgeting is the process of prioritizing funds toward the most profitable projects. Capital financing is determining how a company's investments and endeavors will be financed.

**What are the three main areas of corporate finance?** What Are The Three Main Areas Of Corporate Finance? Corporate finance is split into three sub-sections: capital budgeting, capital structure, and working capital management.

**What are the three 3 principles of corporate finance?** All of corporate finance is built on three principles, which we will call, rather unimaginatively, the investment principle, the financing principle, and the dividend principle.

**What is the key concept of corporate finance?** The primary objective of corporate finance is maximizing shareholder value by means of both long and short-term planning and implementing different strategies. Corporate finance is essential for any business whether big or small.

**What is the main objective of corporate finance?** In essence, corporate finance facilitates the efficient utilization of financial resources to drive business growth and profitability.

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**Is corporate finance difficult?** Finance degrees are generally considered to be challenging. In a program like this, students gain exposure to new concepts, from financial lingo to mathematical problems, so there can be a learning curve.

**Is corporate finance a lot of math?** Math skills Corporate finance uses, more than anything else, a lot of math. The majority of it is quite simple, but it's still math, so corporate finance is particularly ideal for those who are numerically inclined.

### **What degree is best for corporate finance?**

**Is corporate finance just accounting?** While accounting is often seen as the language of business, providing a detailed snapshot of a company's financial situation, finance is the broader canvas. It deals with the management, creation, and study of money, banking, credit, investments, assets, and liabilities.

**What is corporate finance theory?** It classifies all decisions made by any business into three groups—decisions on where to invest the resources or funds that the business has raised, either internally or externally (the investment decision), decisions on where and how to raise funds to finance these investments (the financing decision), and decisions ...

**Is corporate finance high paying?** Corporate Finance Salary in California. \$68,600 is the 25th percentile. Salaries below this are outliers. \$117,400 is the 75th percentile.

**What is the key concept of corporate finance?** The primary objective of corporate finance is maximizing shareholder value by means of both long and short-term planning and implementing different strategies. Corporate finance is essential for any business whether big or small.

**What is the most important aspect of corporate finance?** The Importance of Corporate Finance First, it helps a company allocate its capital effectively by determining which incidents will generate the highest returns and which projects should be funded. It also aids in managing risks by balancing the tradeoff between risk and return.

**What is the objective of corporate finance?** The ultimate objective of Corporate Finance is to optimise a company's value through resource planning and implementation while balancing risk and profitability.

**What are the core elements of corporate finance?** In particular, there are four elements within corporate finance that everyone should be mindful of when doing any type of analysis. These four elements are operating flows, invested capital, cost of capital, and return on invested capital.