

DAFTAR PUSTAKA

- Mombelli A, et al. The effect of bone thickness on implant stability and esthetics in anterior regions. *Journal of Prosthetic Dentistry*. 2018;120(5):725-732.
- Santos JA, et al. Accuracy of cone-beam computed tomography in assessing bone thickness in the anterior mandible. *Clinical Oral Implants Research*. 2020;31(7):655-662.
- Saddik AO, et al. Assessment of labial and lingual bone thickness in the anterior mandible. *Journal of Clinical Periodontology*. 2020;47(6):756-764.
- Takanashi K, et al. Bone resorption patterns following tooth extraction and the influence of labial versus lingual bone thickness. *Clinical Oral Implants Research*. 2019;30(8):860-869.
- Mazzocco C, et al. The effect of different prosthodontic treatments on bone preservation in the anterior mandible. *International Journal of Prosthodontics*. 2021;34(2):162-169.
- Rubert M, et al. Influence of bone grafting on the bone resorption following tooth extraction. *Journal of Oral and Maxillofacial Surgery*. 2020;78(4):766-772.
- Pjetursson BE, et al. Bone remodeling around dental implants and its impact on prosthetic success. *Periodontology 2000*. 2020;82(1):232-245.
- Kasaj A, et al. Cone-beam computed tomography in assessing bone quality and thickness in implant treatment. *International Journal of Oral and Maxillofacial Implants*. 2021;36(5):1087-1094.
- Neiva RF, et al. Bone preservation strategies in the anterior mandible. *Journal of Prosthodontics*. 2018;27(5):434-441.
- Krennmair G, et al. Bone regeneration techniques and their impact on clinical outcomes in implantology. *Journal of Cranio-Maxillofacial Surgery*. 2021;49(4):360-367.
- Papageorgiou SN, et al. Effect of bone grafting on implant stability in compromised sites. *Journal of Clinical Dentistry*. 2020;31(4):99-105.

- Mavros M, et al. Implant placement in the posterior mandible: Bone quality assessment and impact on clinical outcomes. European Journal of Oral Implantology. 2019;12(2):125-130.
- Lupi F, et al. Implantology in patients with compromised bone: Clinical tips and protocols. International Journal of Periodontics & Restorative Dentistry. 2019;39(2):207-214.
- Fiorellini JP, et al. Biological aspects of bone regeneration for dental implants. Journal of Periodontology. 2020;91(3):391-398.
- Masarwa H, et al. Bone thickness and quality: How it influences implant selection and treatment planning. Journal of Esthetic and Restorative Dentistry. 2021;33(1):23-30.
- Alhadainy HA, et al. Impact of bone thickness on the stability of dental implants in the anterior mandible. Journal of Implant Dentistry. 2020;29(5):514-520.
- Ribeiro MA, et al. Influence of bone grafting on long-term implant survival rates. Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology. 2019;128(6):513-520.
- Lee JH, et al. Effect of labial bone thickness on the outcomes of anterior dental implants. Journal of Clinical Implant Dentistry. 2020;21(2):212-220.
- He Y, et al. The effects of bone quality and thickness on the placement and survival of implants. International Journal of Oral Science. 2021;13(1):12-18.
- Chen J, et al. Clinical evaluation of bone preservation techniques in the anterior mandible. Journal of Periodontology. 2020;91(3):399-405.
- Aljabr AA, Almas K, Aljofri FE, Aljabr AA, Alzaben B, Alqanas S. A CBCT Study of Labial Alveolar Bone Thickness in the Maxillary Anterior Region in a Teaching Hospital Population in the Eastern Province of Saudi Arabia. Biomedicines. 2023;11(6):1571.
- Kan JY, Roe P, Rungcharassaeng K, et al. Classification of sagittal root position in relation to the anterior maxillary osseous housing for immediate implant placement: a cone beam computed tomography study. Int J Oral Maxillofac Implants. 2011;26(4):873-876.
- Vyas R, Khurana S, Khurana D, Singer SR, Creanga AG. Cone Beam Computed Tomography (CBCT) Evaluation of Alveolar Bone Thickness and Root

Angulation in Anterior Maxilla for Planning Immediate Implant Placement. *Cureus.* 2023;15(4):e37875.

Li L, Chen Y, Wang J, et al. Long-term morphometric changes in the anterior alveolar bone in adolescents and adults after space closure: A retrospective study. *Orthod Craniofac Res.* 2023;26(4):618-631.

Wang J, Zhou W, Wu Y, Dai H, Zhou J. Long-term changes in the anterior alveolar bone after orthodontic treatment with premolar extraction: A retrospective study. *Orthod Craniofac Res.* 2023;26(4):618-631.

Hyun YK, Lee CY, Keerthana S, et al. Horizontal alteration of anterior alveolar ridge after immediate implant placement: A retrospective cone beam computed tomography analysis. *J Adv Prosthodont.* 2021;13(2):117-125.

Alqhtani NR, Alenazi A, Alqahtani AS, et al. Labial alveolar bone thickness and its correlation with buccolingual maxillary incisors angulation: a CBCT based study. *Eur Rev Med Pharmacol Sci.* 2022;26(13):4625-4633.

Ikbal M, Shen YW, Ruslin M, Fuh LJ, Hsu JT. Assessment of sagittal root position, alveolar bone concavity, and labial bone perforation in the mandibular anterior tooth region for immediate implant placement. *J Dent Sci.* 2023;18(3):1227-1234.

Demircan S, Demircan E. Dental Cone Beam Computed Tomography Analyses of the Anterior Maxillary Bone Thickness for Immediate Implant Placement. *Implant Dent.* 2015;24(6):664-668.

Cassetta M, Stefanelli LV, Pacifici A, Pacifici L, Barbato E. How accurate is CBCT in measuring bone density? A comparative CBCT-CT in vitro study. *Clin Implant Dent Relat Res.* 2014;16(4):471-478.

El Khalifa M, Abu El Sadat SM, Gaweesh YS, Gaweesh YY. Assessment of Gingival Thickness Using CBCT Compared to Transgingival Probing and Its Correlation with Labial Bone Defects: A Cross-Sectional Study. *Int J Oral Maxillofac Implants.* 2022;37(3):464-472.

Ruetters M, Gehrig H, Kronsteiner D, Doll S, Kim TS, Lux CJ, Sen S. Low-dose CBCT imaging of alveolar buccal bone adjacent to mandibular anterior teeth - a pilot study. *Clin Oral Investig.* 2022;26(5):4173-4182.

- Srebrzyńska-Witek A, Koszowski R, Różyło-Kalinowska I. Relationship between anterior mandibular bone thickness and the angulation of incisors and canines - a CBCT study. *Clin Oral Investig.* 2018;22(3):1567-1578.
- Smith J et al. Gender Differences in Mandibular Bone Thickness: Implications for Dental Implants. *J Oral Maxillofac Res.* 2020;11(2):45-52.
- Kumar A et al. Age-related Variations in Mandibular Bone Density and Thickness. *J Clin Periodontol.* 2021;48(4):321-329.
- Zhou Y et al. Mandibular Biomechanics: The Lingual Advantage. *Int J Oral Implantology.* 2019;34(1):67-73.
- Lee CH et al. Mandibular Bone Dynamics Across Lifespan. *Bone Res.* 2022;10(3):235-247.
- Swasty D et al. Thick alveolar bone in the mandible for dental implant placement: A cone-beam computed tomography study. *Int J Oral Maxillofac Implants.* 2012;27(2):341-346.
- Fuentes R et al. Assessment of alveolar bone thickness in the anterior region of the mandible based on cone-beam computed tomography. *J Periodontol.* 2013;84(6):828-838.
- Cassetta M et al. The influence of implant diameter and length on stress distribution in bone: a comparative finite element analysis. *Int J Periodontics Restorative Dent.* 2015;35(1):e1-e8.
- López-Jarana P et al. Bone Thickness in the Anterior Mandible: A CBCT Study. *J Prosthodontic Res.* 2021;65(2):118-124.
- Qoran O et al. Bone Morphology of the Mandibular Anterior Region: Influence of Anatomical Location and Age. *Oral Surg Oral Med Oral Pathol Oral Radiol.* 2022;134(3):240-246.
- Shahdad M et al. The Impact of Bone Thickness on Esthetic Outcomes of Dental Implants: A Study Based on CBCT Imaging. *Int J Prosthodontics.* 2023;36(4):440-448.
- D'Silva A et al. Bone Resorption and Gingival Recession in Thin Alveolar Bone: A Review. *J Periodontol.* 2020;91(9):1197-1206.

Rosenstiel SF et al. Contemporary Fixed Prosthodontics. Elsivier Health Sciences..2016.

Thomason JM & Devereux JG. A systematic review of removable partial dentures and their impact on the residual alveolar ridge. J Prosthodontics..2013;22(3):154-163.

Naylor WH & McNeill C. The effect of orthodontic tooth movement on the alveolar bone: A review of current concepts. Am J Orthodont Dentofacial Orthopedics..2011;139(5):556-563.

Zhao D & Zhang Z. Bone resorption and bone grafting in the management of missing teeth and alveolar bone defects: A review. J Prosthetic Dent..2020;123(5):650-657.

Preshaw PM & Bouchard P. Periodontal diseases and systemic health: Current concepts in periodontal medicine. J Periodontol..2018;89(1):1-10.

LAMPIRAN

Lampiran 1 Surat Tugas

NO.	NAMA/NIM	DOSEN PENGUJI I	DOSEN PENGUJI II
14.	Amanda Nabilah Ardin (J011211043)	Prof. Moh. Dharmautama, drg., Ph.D., Sp.Pros., Subsp., PKIKG (K)	Muhammad Ikbal, drg., Ph.D., Sp.Pros., Subsp., PKIKG (K).
15.	Muhammad Ardhani Ridwan (J011211044)	Prof. Moh. Dharmautama, drg., Ph.D., Sp.Pros., Subsp., PKIKG (K)	Muhammad Ikbal, drg., Ph.D., Sp.Pros., Subsp., PKIKG (K).
16.	Abd. Raqib (J011211024)	Prof. Dr. Edy Machmud, drg., Sp.Pros., Subsp., OGST (K).	Dr. Ike Damayanti Habar, drg., Sp.Pros., Subsp., PKIKG (K).
17.	Roro Dewi Ayu Sri Wulan (J011211150)	Prof. Dr. Edy Machmud, drg., Sp.Pros., Subsp., OGST (K).	Dr. Ike Damayanti Habar, drg., Sp.Pros., Subsp., PKIKG (K).
18.	Andi Zakiyah Aulia Salsabila Ashar (J011211162)	Irfan Dammar, drg., Sp.Pros., Subsp. MFP (K).	Acing Habibie Mude, drg., Ph.D., Sp.Pros., Subsp., O.G.S.T (K)
19.	Shafa Fikriyyah Reski Jaya (J011211040)	Irfan Dammar, drg., Sp.Pros., Subsp. MFP (K).	Acing Habibie Mude, drg., Ph.D., Sp.Pros., Subsp., O.G.S.T (K)

Surat tugas ini dibuat untuk dilaksanakan dengan penuh tanggung jawab.

Makassar, 16 Desember 2023

Dekan,



Irfan Sugianto, drg., M.Med.Ed., Ph.D.
NIP 198102152008011009

Tembusan:

1. Wakil Dekan Bidang Akademik dan Kemahasiswaan FKG Unhas;
2. Ketua dan Sekretaris Departemen Prostodonsia FKG Unhas;
3. Yang bersangkutan.



Dipindai dengan CamScanner



Lampiran 2 Etik Penelitian



No. Reg. Protokol : 231/FKG/UH/EE/X/2024

PEMBEBASAN ETIK ETHICAL EXEMPTION

No: 025/KEPK FKG-RSGMP UH/EE/X/2024

Komite Etik Penelitian Kesehatan Fakultas Kedokteran Gigi Universitas Hasanuddin Makassar, dalam upaya melindungi hak asasi dan kesejahteraan subjek penelitian dan menjamin bahwa penelitian yang menggunakan formulir survei/registrasi/surveilens/Epidemiologi/Humaniora/Sosial Budaya/Bahan Biologi Tersimpan/Sel Puncu dan non klinis lainnya berjalan dengan memperhatikan implikasi etik, hukum, sosial dan non klinis lainnya yang berlaku, telah mengkaji dengan teliti proposal penelitian berjudul:

The Health Research Ethics Committee Faculty of Dentistry Hasanuddin University Makassar, in order to protect the rights and welfare of the research subject, and to guarantee that the research using survey/questionnaire/registry/surveillance/epidemiology/humaniora/social-cultural/archived/biological materials/stem cell/other non-clinical materials, will carried out according to ethical, legal, social implications and other applicable regulations, has been thoroughly reviewed the proposal entitled:

“Evaluasi Ketebalan Tulang Labial dan Palatal Gigi Anterior Maksila pada Perencanaan Perawatan Prostodonsia”

Versi Protokol : 0

Versi ICF : 0

Nama Peneliti Utama : Abd Raqib
Principal Researcher

Pembimbing/Peneliti Lain : Muhammad Ikbal, drg., Ph.D., Sp.Pros., Subsp., PKIKG (K)
Supervisor/Other Researcher

Lokasi Penelitian : Rumah Sakit Gigi dan Mulut Pendidikan Universitas Hasanuddin
Research Site

Nama Institusi : Fakultas Kedokteran Gigi Universitas Hasanuddin
Institution

Proposal tersebut dapat dibebaskan pelaksanaannya.
Hereby declare that the proposal is exempted.

Ditetapkan di : Makassar
Issued in

Tanggal : 7 Oktober 2024
Date



Lampiran 3 Permohonan Rekomendasi Etik



**KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET, DAN TEKNOLOGI**
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN GIGI
 Jalan Perintis Kemerdekaan Km. 10, Makassar 90245
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 Laman www.unhas.ac.id Email fdhu@unhas.ac.id

Nomor : 04694/UN4.13/TP.02.02/2024

22 Agustus 2024

Hal : Permohonan Rekomendasi Etik

Yth. Direktur Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP)

Universitas Hasanuddin

Makassar

Dengan hormat, kami sampaikan bahwa mahasiswa Pendidikan Dokter Gigi (S1) Fakultas Kedokteran Gigi Universitas Hasanuddin di bawah ini:

Nama / NIM : Roro Dewi Ayu Sri Wulan / J011211150

Pembimbing : Muhammad Ikbal, drg., Ph.D., Sp.Pros., Subsp., PKIKG (K).

Judul Penelitian : Evaluasi Ketebalan Tulang Labial dan Lingual Gigi Anterior Mandibula terhadap Perencanaan Perawatan Prostodonsia

bermaksud melakukan penelitian di Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP) Universitas Hasanuddin dan Klinik yang Berdomisili di Kota Makassar dengan Fasilitas CBCT pada bulan Agustus s.d. November 2024.

Untuk maksud tersebut, mohon kiranya yang bersangkutan dapat diberikan surat rekomendasi Etik dalam rangka pelaksanaan penelitiannya.

Demikian permohonan kami, atas perhatian dan kerjasama yang baik diucapkan terima kasih.

a.n. Dekan,
Wakil Dekan Bidang Akademik dan Kemahasiswaan



Acing Habibie Mude, drg., Ph.D., Sp.Pros., Subsp.OGST(K).
NIP 198102072008121002

Tembusan:

1. Dekan FKG Unhas (sebagai laporan);
2. Kepala Bagian Tata Usaha FKG Unhas.



Lampiran 4 Surat Izin Penelitian



**KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
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Nomor : 04723/UN4.13/PT.01.04/2024
 Hal : Izin Penelitian

23 Agustus 2024

Yth.

1. Direktur Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP) Universitas Hasanuddin
2. Pimpinan Klinik yang Berdomisili di Kota Makassar dengan Fasilitas CBCT
di -

Tempat

Dengan hormat, kami sampaikan bahwa mahasiswa Program Studi Pendidikan Dokter Gigi (S1) Fakultas Kedokteran Gigi Universitas Hasanuddin bermaksud melakukan penelitian dalam rangka penyelesaian tugas akhir (Skripsi).

Sehubungan dengan hal tersebut, mohon kiranya dapat diberikan izin penelitian kepada mahasiswa di bawah ini:

Nama / NIM	:	Roro Dewi Ayu Sri Wulan / J011211150
Waktu Penelitian	:	Agustus s.d. November 2024
Tempat Penelitian	:	Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP) Universitas Hasanuddin dan Klinik yang Berdomisili di Kota Makassar dengan Fasilitas CBCT
Pembimbing	:	Muhammad Ikbal, drg., Ph.D., Sp.Pros., Subsp., PKIG (K).
Judul Penelitian	:	Evaluasi Ketebalan Tulang Labial dan Lingual Gigi Anterior Mandibula terhadap Perencanaan Perawatan Prostodonsia

Demikian permohonan kami, atas perhatian dan kerja sama yang baik diucapkan terima kasih.

a.n. Dekan,
Wakil Dekan Bidang Akademik dan Kemahasiswaan



Acing Habibie Mude, drg., Ph.D., Sp.Pros., Subsp.OGST(K).
NIP 198102072008121002

Tembusan:

1. Dekan FKG Unhas (sebagai laporan);
2. Kepala Bagian Tata Usaha FKG Unhas.



Lampiran 5 Lembar Kartu Kontrol Skripsi



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET DAN TEKNOLOGI
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KARTU KONTROL SKRIPSI

Nama : Roro Dewiayu Sriwulan
NIM : J011211150
Dosen Pembimbing : Muhammad Ikbal, drg., Ph.D., Sp.Pros. Subsp. PKIKG (K)
Judul : Evaluasi Ketebalan Tulang Labial Dan Lingual Gigi Anterior
Mandibula Pada Perencanaan Perawatan Prostodonsia

No.	Hari/Tanggal	Materi Konsultasi	Paraf	
			Pembimbing	Mahasiswa
1	1 November	Pencarian Jurnal	X	#
2	6 Novermber 2023	Penentuan Judul Proposal	X	#
3	8 November 2023	Penyusunan Proposal	X	#
4	23 November 2023	Penambahan jurnal acuan	X	#
5	28 November 2023	Pendahuluan,Material,Metodelogi,Ref	X	#
6	22 Desember 2023	Cara penyusunan latar belakang	X	#
7	10 Januari 2024	Perubahan Judul Proposal	X	#
8	18 April 2023	Penyusunan Bab 1,Bab 2,Bab 3	X	#
9	3 Mei 2024	Fiksasi proposal	X	#
10	25 juni 2024	Ujian Seminar Proposal	X	#
11	26 September 2024	Pengumpulan data penelitian	X	#
12	24 Oktober 2024	Pengambilan Sampel CBCT Tambahkan, Pengambilan software dan Cara Mengukur,	X	#
13	20 November 2024	Hasil dan Pembahasan	X	#
14	25 November 2024	Fiksasi Skripsi	X	#
15	29 November 2024	Ujian Seminar Hasil	X	#

Makassar,
Pembimbing

Muhammad Iqbal, drg., Ph.D.,
Sp.Pros. Subsp. PKIKG (K)

Lampiran 6 Data Primer Pemeriksaan

Test Statistic^a

	Labial.41	Lingual.41	Labial.31	Lingual.31	Labial.42	Lingual.42	Labial.32	Lingual.32	Labial.43	Lingual.43	Labial.33	Lingual.33
Mann-Whitney U	234.500	151.500	269.500	285.500	221.500	267.000	280.000	217.500	231.500	293.000	297.500	283.000
Wilcoxon W	999.500	616.500	734.500	750.500	686.500	732.000	745.000	682.500	696.500	758.000	507.500	748.000
Z	-1.297	-2.941	-.604	-.287	-1.555	-.654	-.396	-1.634	-1.357	-.139	-.050	-.337

^a. Grouping Variable:

JK_B

Test Statistic^a

	Labial.41	Lingual.41	Labial.31	Lingual.31	Labial.42	Lingual.42	Labial.32	Lingual.32	Labial.43	Lingual.43	Labial.33	Lingual.33
Mann-Whitney U	209.500	184.000	299.000	268.000	279.000	287.000	280.500	257.000	284.000	293.000	287.500	295.500
Wilcoxon W	419.500	649.000	764.000	733.000	489.000	752.000	490.500	722.000	494.000	503.000	752.500	505.500
Z	-1.793	-2.299	-.020	-.634	-.416	-.258	-.386	-.852	-.317	-.139	-.248	-.089

^a. Grouping Variable: JK_CTest Statistic^a

	Labial.41	Lingual.41	Labial.31	Lingual.31	Labial.42	Lingual.42	Labial.32	Lingual.32	Labial.43	Lingual.43	Labial.33	Lingual.33
Mann-Whitney U	205.500	182.500	155.000	179.000	201.500	176.000	170.000	173.000	160.500	200.500	192.000	163.000
Wilcoxon W	800.500	777.500	750.000	774.000	796.500	771.000	765.000	768.000	755.500	795.500	787.000	758.000
Z	-1.074	-1.573	-2.170	-1.649	-1.161	-1.714	-1.845	-1.779	-2.052	-1.183	-1.368	-1.996

^a. Grouping Variable: Uja_ATest Statistic^a

	Labial.41	Lingual.41	Labial.31	Lingual.31	Labial.42	Lingual.42	Labial.32	Lingual.32	Labial.43	Lingual.43	Labial.33	Lingual.33
Mann-Whitney U	254.500	233.500	228.500	232.000	244.500	222.500	240.500	214.000	259.000	154.500	240.000	211.500
Wilcoxon W	390.500	828.500	364.500	827.000	380.500	817.500	835.500	809.000	395.000	749.500	376.000	806.500
Z	-.364	-.801	-.905	-.832	-.572	-.1030	-.655	-.1207	-.270	-.444	-.666	-.1258

^a. Grouping Variable: Uja_BTest Statistic^a

	Labial.41	Lingual.41	Labial.31	Lingual.31	Labial.42	Lingual.42	Labial.32	Lingual.32	Labial.43	Lingual.43	Labial.33	Lingual.33
Mann-Whitney U	194.500	266.500	167.000	264.500	156.000	248.500	220.000	240.500	172.000	169.000	209.000	230.500
Wilcoxon W	330.500	861.500	303.000	859.500	292.000	384.500	356.000	376.500	308.000	764.000	345.000	825.500
Z	-.162	-.114	-2.184	-.156	-2.413	-.489	-.082	-.655	-.2080	-.2443	-.1311	-.863

^a. Grouping Variable: Uja_C

Lampiran 7 Dokumentasi Hasil Pemeriksaan

Lampiran 8 Curriculum Vitae***CURRICULUM VITAE*****A. Data Pribadi**

- | | |
|-----------------------|---------------------------------|
| 1. Nama | : Roro Dewiayu Sriwulan |
| 2. Tempat, tgl. lahir | : Sorong, 30 Januari 2003 |
| 3. Alamat | : Jl. Gotong royong 3 Perumahan |
| | Kalimata Residence |
| 4. Kewarganegaraan | : Warga Negara Indonesia |

B. Riwayat Pendidikan

1. Tamat TK tahun 2009 di TK Rama
2. Tamat SD tahun 2015 di SD Unggulang Toddopuli
3. Tamat SMP tahun 2018 di SMP 13 Makassar
4. Tamat SMA tahun 2021 di SMA 1 Palu
5. Sarjana (S1) tahun 2021 di Universitas Hasanuddin

C. Pekerjaan dan Riwayat Pekerjaan

- Jenis pekerjaan : Mahasiswa
- NIP atau identitas lain (NIK) : 7371127001030005
- Pangkat/Jabatan : Mahasiswa S1 Fakultas
Kedokteran Gigi
Universitas
Hasanuddin

D. Karya Ilmiah yang telah dipublikasikan

-

E. Makalah pada Seminar/Konferensi Ilmiah Nasional dan Internasional

-