

NASKAH PUBLIKASI

**FAKTOR-FAKTOR YANG MEMPENGARUHI *MENARCHE* DINI
PADA SISWI SMP N 4 SAMIGALUH KECAMATAN SAMIGALUH
TAHUN 2021**



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JURUSAN KEBIDANAN
POLITEKNIK KESEHATAN KEMENTERIAN KESEHATAN
YOGYAKARTA
2020**

PERSETUJUAN PEMBIMBING

Naskah Publikasi

“FAKTOR-FAKTOR YANG MEMPENGARUHI *MENARCHE* DINI PADA SISWI SMP N 4
SAMIGALUH KECAMATAN SAMIGALUH TAHUN 2021”

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**FAKTOR-FAKTOR YANG MEMPENGARUHI *MENARCHE* DINI PADA
SISWI SMP N 4 SAMIGALUH KECAMATAN SAMIGALUH
TAHUN 2021**

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ABSTRAK

Latar Belakang: *Menarche* semakin awal membuat perkembangan fisik yang terlalu cepat sehingga dapat meningkatkan terjadinya berbagai gangguan kesehatan, gangguan psikologis dan masalah kesehatan reproduksi. Hal ini dapat dipengaruhi beberapa beberapa factor yang mempengaruhi seperti status gizi, usia *menarche* ibu, status social ekonomi maupun paparan media audiovisual.

Tujuan: Penelitian ini bertujuan untuk mengetahui faktor-faktor yang berpengaruh terhadap *menarche* dini pada siswi SMP N 4 Samigaluh Kecamatan Samigaluh.

Metode: Penelitian ini menggunakan metode kuantitatif dengan desain *cross sectional*. Populasi pada penelitian ini adalah siswi putri di SMP N 4 Samigaluh. Teknik pengambilan sampel dengan *total sampling* berdasarkan kriteria inklusi dan eksklusi sebanyak 107 responden. Instrument yang digunakan untuk mengumpulkan data adalah kuesioner yang telah diuji validitas dan reliabilitasnya. Analisis data menggunakan uji *chi-square* untuk analisis bivariat dan uji *regresi logistik* untuk analisis multivariat

Hasil: Hasil penelitian menunjukkan ada hubungan status gizi dengan usia *menarche* ($P=0,000$), ada hubungan usia *menarche* ibu dengan usia *menarche* ($P=0,021$), tidak ada hubungan pendidikan ayah dengan usia *menarche* ($P=0,698$), tidak ada hubungan pendidikan ibu dengan usia *menarche* ($P=0,239$) dan ada hubungan penghasilan orangtua dengan usia *menarche* ($P=0,000$), ada hubungan akses konten pornografi dengan usia *menarche* ($P=0,002$), dan tidak ada hubungan penggunaan smartphone dengan usia *menarche* ($P=0,105$). Variabel yang paling bermakna yang berpengaruh terhadap usia *menarche* adalah status gizi dengan nilai signifikan sebesar 0,004.

Kesimpulan: Faktor-faktor yang berpengaruh terhadap *menarche* dini pada siswi SMP N 4 Samigaluh Kecamatan Samigaluh yaitu faktor status gizi, usia *menarche* ibu, penghasilan orangtua dan akses konten pornografi.

Kata kunci: *menarche* dini, status gizi, usia *menarche* ibu, penghasilan orangtua, akses konten pornografi.

***Factors Affecting Early Menarche In Students Of SMP N 4 Samigaluh
Samigaluh District in 2021***

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ABSTRACT

Background: *Early menarche makes physical development too fast so that it can increase the occurrence of various health problems, psychological disorders and reproductive health problems. This can be influenced by several influencing factors such as nutritional status, mothers' menarche age, socioeconomic status and exposure to audiovisual media*

Objective: *This study aims to know factors affecting early menarche among students in junior high school 4 Samigaluh district of Samigaluh year 2021.*

Method: *This study used a quantitative research with cross sectional design. The population in this study were female students in junior high school 4 Samigaluh. Sampling technique used total sampling as many 107 respondents. The instrument used to collect data is a questionnaire that has been tested for validity and reliability. Bivariate analysis used chi square test while multivariate test used logistic regression.*

Result: *There was correlation between nutritional status and menarche age ($P=0,000$). There was correlation between mothers' menarche age and menarche age ($P=0,021$). There was no correlation between father's education and menarche age ($P=0,698$), there was no correlation between mother's education and menarche age ($P=0,239$) and there was correlation between parent's income and menarche age ($P=0,000$). There was correlation between pornographic content access and menarche age ($P=0,002$), and there was no correlation between smartphone use and menarche age ($P=0,105$). The most affecting variable toward menarche age was nutritional status with significant value 0,004.*

Conclusion: *factors affecting early menarche among students in junior high school 4 Samigaluh district of Samigaluh year 2021 were nutritional status, mothers' menarche age, parent's income and pornographic content access.*

Keywords: *early menarche, factors, nutritional status, parent's income, pornographic content access.*

PENDAHULUAN

Data *World Health Organization* (WHO) menunjukkan kelompok remaja usia 10-19 tahun berjumlah 1,2 milyar atau 18 persen dari jumlah penduduk dunia. Data statistik kesejahteraan rakyat 2018 menunjukkan jumlah penduduk perempuan usia 10-19 tahun adalah 22 juta atau 16,71 persen dari jumlah penduduk Indonesia. Jumlah remaja Daerah Istimewa Yogyakarta (DIY) usia 10-19 tahun berdasarkan data Badan Pusat Statistik (BPS) DIY tahun 2019 sebesar 535.048 orang atau sekitar 14,07 persen dari total jumlah penduduk di DIY. Jumlah remaja perempuan usia 10-19 tahun adalah 261.144 atau sekitar 49 persen dari total remaja usia 10-19 tahun.^{1,2,3}

Hasil Survey Demografi Kesehatan Indonesia (SDKI) Remaja Tahun 2017 menunjukkan usia *menarche* perempuan Indonesia adalah usia kurang dari 10 tahun sebanyak 2%, usia 11 tahun sebanyak 7%, usai 12 tahun sebanyak 12%, usia 13 tahun sebanyak 27,7%, usia 14 tahun sebanyak 22,9%, usia 15 tahun sebanyak 10,9%, usia 16 tahun sebanyak 2,3%, usia 17 tahun sebanyak 3,6%. Berdasarkan data SDKI 2017 terdapat 2% remaja perempuan yang mengalami *menarche* dini.⁴

Indonesia mengalami pergeseran usia *menarche* lebih muda. Survey Demografi Kesehatan Indonesia (SDKI) 2012 menyatakan remaja yang mengalami *menarche* usia ≤ 11 tahun adalah 7%, sedangkan hasil SDKI 2017 menyatakan remaja yang mengalami *menarche* usia ≤ 11 tahun adalah 9%.^{4,5}

Usia *menarche* yang semakin awal membuat perkembangan fisik yang terlalu cepat. Hal ini dapat meningkatkan terjadinya berbagai gangguan kesehatan, gangguan psikologis dan masalah kesehatan reproduksi. Pergeseran usia *menarche* yang cenderung terjadi pada usia yang semakin muda mengakibatkan meningkatnya aktifitas seksual pada usia dini, dan mempunyai risiko tinggi terjadinya pelecehan seksual, penyakit menular seksual serta kehamilan pada usia remaja yang semakin meningkat. Dampak dari *menarche* dini secara tidak langsung akan meningkatkan risiko terjadinya kehamilan remaja yang dapat berlanjut pada aborsi sehingga dapat mempengaruhi tingkat kematian ibu.⁴

Status gizi merupakan faktor yang mempengaruhi terjadinya *menarche*. Hasil penelitian menunjukkan responden dengan gizi lebih/gemuk berjumlah 29,9% dan yang mengalami mengalami *menarche* dini terdapat 44%. Hasil analisis diperoleh ada hubungan yang bermakna antara status gizi dengan kejadian *menarche* dini pada siswi SMP Negeri 4 Metro. Responden yang mengalami kegemukakan berisiko mengalami menstruasi dini sebesar 2,45 kali lebih besar dibandingkan siswi yang normal atau kurus (POR=2,45).⁵

Berdasarkan hasil survei pendahuluan yang telah dilakukan kepada 30 siswa kelas VII dan VIII SMP N 4 Samigaluh, di dapatkan 3 orang siswa belum mengalami menstruasi, mengalami menstruasi pertama usia 10-11 tahun sejumlah 7 siswa, usia 12-13 tahun 14 siswa, usia 14-15 tahun 6 siswa. SMPN 4 Samigaluh merupakan salah satu sekolah yang memiliki murid terbanyak di wilayah kecamatan Samigaluh serta memiliki karakteristik siswi yang bermacam-macam dari latar belakang keluarga dan status ekonomi. Pemilihan lokasi di SMPN 4 Samigaluh karena lokasi sekolah yang satu kompleks dengan Sekolah Menengah Kejuruan (SMK). Siswa SMP yang sebagian besar merupakan remaja kategori remaja awal usia 11-14 tahun akan memungkinkan untuk lebih banyak berinteraksi dan mencontoh perilaku-perilaku siswa yang bersekolah pada jenjang yang lebih tinggi. Hal ini tentunya akan berpengaruh pada perilaku dan psikis siswa SMPN 4 Samigaluh. Berdasarkan uraian diatas, maka peneliti tertarik untuk melakukan penelitian tentang Faktor-Faktor yang Mempengaruhi Usia *Menarche* Dini Pada Siswi SMP N 4 Samigaluh Kecamatan Samigaluh.

METODE

Jenis penelitian ini adalah penelitian kuantitatif yaitu data penelitian berupa angka-angka dan dianalisis menggunakan statistik. Penelitian ini dilaksanakan menggunakan pendekatan kuantitatif dengan desain penelitian *cross sectional*, yaitu suatu penelitian dimana peneliti melakukan observasi atau pengukuran variabel pada satu saat tertentu dan tidak melakukan tindak lanjut terhadap pengukuran yang dilakukan. Populasi dalam penelitian adalah sejumlah

besar subyek yang mempunyai karakteristik tertentu. Populasi dalam penelitian ini adalah siswi SMP N 4 Samigaluh yang telah mengalami menstruasi.⁶ Jumlah populasi dalam penelitian ini adalah sejumlah 111 siswi.

HASIL DAN PEMBAHASAN

Tabel 1. Distribusi Frekuensi Karakteristik Siswi di SMP N 4 Samigaluh Kecamatan Samigaluh

Karakteristik	Frekuensi	Persentase (%)
<i>Usia menarche</i>		
Dini (≤ 10 tahun)	7	6,5
Normal (11-15 tahun)	100	93,5
Status Gizi		
Gizi kurang	22	20,6
Gizi normal	73	68,2
Gizi lebih	9	8,4
Obesitas	3	2,8
<i>Usia menarche Ibu</i>		
Dini	4	3,7
Normal	103	96,3
Penghasilan Orang Tua		
Rendah ($\leq 1.000.000$)	78	72,9
Sedang (Rp 1.000.000 – Rp 1.800.000)	14	13,1
Tinggi (\geq Rp 1.800.000)	15	14,0
Pendidikan Ayah		
Rendah (<SMA/SMK)	59	55,1
Tinggi (>SMA/SMK)	48	44,9
Pendidikan Ibu		
Rendah (<SMA/SMK)	59	55,1
Tinggi (>SMA/SMK)	48	44,9
Akses terhadap konten pornografi melalui smartphone		
Terpapar	47	43,9
Tidak terpapar	60	56,1
Usia pertama menggunakan smartphone		
Sebelum <i>menarche</i>	76	71,0
Setelah <i>menarche</i>	31	29,0
Total	107	100

Berdasarkan tabel 4. menunjukkan bahwa usia *menarche* siswi mayoritas tergolong normal sebanyak 100 orang (93,5%), status gizi normal sebanyak 73 orang (68,3%) dan mayoritas usia *menarche* ibu kategori normal sebanyak 103 orang (96,3%). Mayoritas status sosial ekonomi orangtua kategori rendah sebanyak 78 orang (72,9%), pendidikan baik ayah maupun ibu kategori rendah yaitu masing-masing 59 orang (55,1%). Akses konten pornografi siswi mayoritas masuk dalam kategori tidak terpapar sebanyak 60 orang (56,1%) dan penggunaan smartphone sebagai besar sebelum *menarche* yaitu sebanyak 76 orang (71,0%).

Tabel 2. Tabulasi Silang Karakteristik Responden dengan Usia *Menarche* pada Siswi di SMP N 4 Samigaluh Kecamatan Samigaluh.

VARIABEL	Usia <i>Menarche</i>						P-value
	Dini		Normal		Total		
	N	%	N	%	N	%	
Status Gizi							
Gizi kurang	0	0,0	22	20,6	22	20,6	0,000
Gizi normal	1	0,9	72	67,3	73	68,2	
Gizi lebih	5	4,7	4	3,7	9	8,4	
Obesitas	1	0,9	2	1,9	3	2,8	
Usia <i>Menarche</i> Ibu							
Dini	2	1,9	2	1,9	4	3,7	0,021
Normal	5	4,7	98	91,6	103	96,3	
Penghasilan Orang Tua							
Rendah	1	0,9	77	72,0	78	72,9	0,000
Sedang	1	0,9	13	12,1	14	13,1	
Tinggi	5	4,7	10	9,3	15	14,0	
Pendidikan Ayah							
Rendah	3	2,8	56	52,3	59	55,1	0,698
Tinggi	4	3,7	44	41,1	48	44,9	
Pendidikan Ibu							
Rendah	2	1,9	57	53,3	59	55,1	0,239
Tinggi	5	4,7	43	40,2	48	44,9	
Akses terhadap konten pornografi melalui smartphone							
Terpapar	7	6,5	40	37,4	47	43,9	0,002
Tidak terpapar	0	0,0	60	56,1	60	56,1	
Usia pertama menggunakan smartphone							

Sebelum <i>menarche</i>	7	6,5	69	64,5	76	71,0	0,105
Setelah <i>menarche</i>	0	0,0	31	29,0	31	29,0	

Berdasarkan tabel 5 menunjukkan bahwa mayoritas siswi dengan usia *menarche* kategori dini memiliki status gizi lebih sebanyak 5 orang (4,7%), sedangkan siswi dengan usia *menarche* kategori normal memiliki status gizi normal sebanyak 72 orang (67,3%). Berdasarkan analisis *chi-square* nilai signifikansi *p-value* sebesar 0,000 ($p < 0,05$). Artinya ada hubungan antara status gizi dengan usia *menarche*.

Hasil penelitian menunjukkan usia *menarche* siswi kategori dini dengan usia *menarche* ibu kategori normal sebanyak 5 orang (4,7%), sedangkan usia *menarche* siswi kategori normal dengan usia *menarche* ibu juga kategori normal sebanyak 98 orang (91,6%). Berdasarkan analisis *chi-square* diperoleh nilai signifikansi *p-value* sebesar 0,021 ($p < 0,05$). Artinya ada hubungan antara usia *menarche* ibu dengan usia *menarche* siswi.

Hasil penelitian menunjukkan usia *menarche* siswi kategori dini mayoritas memiliki status ekonomi kategori tinggi sebanyak 5 orang (4,7%), sedangkan usia *menarche* normal kategori normal memiliki status ekonomi kategori rendah sebanyak 77 orang (72,0%). Berdasarkan analisis *chi-square* nilai signifikansi *p-value* sebesar 0,000 ($p < 0,05$). Artinya ada hubungan antara status social ekonomi dengan usia *menarche*.

Penelitian ini menunjukkan siswi yang mengalami *menarche* kategori dini dengan pendidikan ayah tinggi sebanyak 4 orang (3,7%), sedangkan *menarche* kategori normal dengan pendidikan ayah rendah sebanyak 56 orang (52,3%). Berdasarkan perhitungan *chi-square* nilai signifikansi *p-value* sebesar 0,499 ($p > 0,05$). Artinya tidak ada hubungan antara pendidikan ayah dengan usia *menarche* siswi.

Siswi yang mengalami *menarche* kategori dini dengan pendidikan ibu tinggi sebanyak 5 orang (4,7%), sedangkan usia *menarche* kategori normal dengan pendidikan ibu rendah sebanyak 57 orang (53,3%). Berdasarkan perhitungan *chi-square* nilai signifikansi *p-value*

sebesar 0,239 ($p > 0,05$). Artinya tidak ada hubungan antara pendidikan ibu dengan usia *menarche* siswi.

Hasil penelitian menunjukkan siswi yang mengalami *menarche* kategori dini, terpapar akses konten pornografi sebanyak 7 orang (6,5%), dan sedangkan *menarche* kategori normal mayoritas tidak terpapar akses konten pornografi sebanyak 60 orang (56,1%). Berdasarkan perhitungan *chi-square* nilai signifikansi *p-values* sebesar 0,002 ($p < 0,05$). Artinya ada hubungan antara akses konten pornografi dengan usia *menarche* siswi.

Hasil penelitian menunjukkan siswi yang mengalami *menarche* kategori dini dan penggunaan smartphone sebelum *menarche* sebanyak 7 orang (6,5%), sedangkan usia *menarche* kategori normal mayoritas penggunaan smartphone sebelum *menarche* sebanyak 69 orang (64,5%). Berdasarkan perhitungan *chi-square* nilai signifikansi *p-value* sebesar 0,105 ($p > 0,05$). Artinya tidak ada hubungan antara penggunaan smartphone dengan usia *menarche* siswi.

Tabel 3. Usia Pertama Penggunaan Smartphone

Usia Pertama Penggunaan Smartphone	frekuensi	Persentase(%)
<10 TAHUN	15	14
10-12 TAHUN	50	46
>12 TAHUN	42	39

Tabel 4. Penggunaan Smartphone dalam Sehari

Penggunaan Smartphone dalam sehari	Frekuensi	Persentase(%)
<4 KALI	30	28
5-6 KALI	56	52
>7 KALI	21	20

Tabel 5. Durasi Penggunaan Smartphone

Durasi Penggunaan Smartphone dalam sehari	frekuensi	Persentase (%)
<6 JAM	11	10,2

6-7 JAM	36	33,6
>7 JAM	60	56,2

Tabel 6. Penggunaan Kuota Internet

Penggunaan Kuota Internet	frekuensi	Persentase (%)
<2 GB	22	20,5
2-4 GB	44	41,2
>4 GB	41	38,3

Tabel 7. Jenis Aplikasi Yang Dimiliki

Jenis Aplikasi Yang Dimiliki	Frekuensi	Persentase (%)
WhatsApp	107	100
Telegram	25	23,3
Facebook	75	70
Instagram	62	57,9
Youtube	74	69,1
Tiktok	72	67,2

Dari data tabel diatas menunjukkan usia pertama menggunakan smartphone paling banyak pada usia 10-12 tahun (46%). Penggunaan smartphone dalam sehari paling banyak adalah 5-6 kali (52%). Durasi yang paling banyak yaitu lebih dari 7 jam (56,2%) dengan penggunaa kuota 2-4 GB sebesar 41,2%. Jenis aplikasi media sosial yang paling banyak dimiliki siswi adalah *WhatsApp* karena semua siswi memiliki akun *WhatsApp* dan diurutkan kedua dan ketiga adalah Youtube (69,1%) dan Tiktok (67,2%)

Tabel 8.Regresi Logistik Faktor yang Mempengaruhi Usia *Menarche* pada Siswi di SMP N 4 Samigaluh Kecamatan Samigaluh

Variabel	P-value	Exp(B)	CI 95% Lower	Upper
Contants				
Sosial	0,013	0,086	0,012	0,601
Ekonomi				
Status Gizi	0,004	0,042	0,0042	0,356

Keterangan : Langkah 6

Berdasarkan tabel 6 di atas hasil analisis regresi logistik menunjukkan bahwa sosial ekonomi dan status gizi berhubungan signifikan dengan usia *menarche*. Faktor yang paling bermakna yang berpengaruh terhadap usia *menarche* pada siswi di SMP N 4 Samigaluh adalah status gizi nilai signifikan sebesar 0,004 dengan Exp(B) sebesar 0,042 (CI95% 0,005-0,356).

Mayoritas usia *menarche* siswi dalam kategori normal (93,5%). Sejalan dengan penelitian sebelumnya oleh Napitupulu bahwa 50,8% responden usia *menarche* pada kategori normal. Penelitian Gultom juga menyebutkan bahwa 55,4% responden mengalami *menarche* kategori normal. Sejalan juga dengan penelitian Suhartini bahwa 65% usia *menarche* siswi SMP dalam kategori normal.^{7,8,9}

Siswi dengan usia *menarche* kategori dini memiliki status gizi lebih sebanyak 5 orang (4,7%), sedangkan siswi dengan usia *menarche* kategori normal memiliki status gizi normal sebanyak 72 orang (67,3%). Dalam penelitian ini diketahui bahwa ada hubungan antar status gizi dengan usia *menarche* *p-value* sebesar 0,000 ($p < 0,05$).

Hasil penelitian menunjukkan sebagian besar usia *menarche* siswi kategori dini dengan usia *menarche* ibu kategori normal sebanyak 5 orang (4,7%), sedangkan usia *menarche* siswi kategori normal dengan usia *menarche* ibu juga kategori normal sebanyak 98 orang (91,6%). Penelitian ini menunjukkan ada hubungan antara usia *menarche* ibu dengan usia *menarche* siswi *p-value* sebesar 0,021 ($p < 0,05$). Sejalan dengan penelitian yang dilakukan oleh Mariane pada siswi SMP Negeri 1 Salatuhu menunjukkan bahwa ada hubungan usia *menarche* ibu dengan usia *menarche*.¹⁰

Usia *menarche* siswi kategori dini mayoritas memiliki status ekonomi kategori tinggi sebanyak 5 orang (4,7%), sedangkan usia *menarche* normal kategori normal memiliki status ekonomi kategori rendah sebanyak 77 orang (72,0%). Berdasarkan analisis *chi-square* nilai signifikansi *p-value* sebesar 0,000 ($p < 0,05$). Artinya ada hubungan antara

status sosial ekonomi dengan usia *menarche*. Hasil penelitian Indrayani menunjukkan bahwa semakin tinggi status ekonomi maka usia awal *menarche* semakin muda. Kondisi sosial ekonomi yang cukup berhubungan dengan kemampuan daya beli dan kemudahan untuk mendapatkan bahan makanan.¹¹

Pada variabel paparan media audiovisual diketahui nilai signifikan sebesar 0,002 yang menunjukkan bahwa ada hubungan antara akses konten pornografi dengan usia *menarche*. Mayoritas usia *menarche* kategori dini, terpapar akses konten pornografi sebanyak 7 orang (6,5%), dan sedangkan usia *menarche* kategori normal mayoritas tidak terpapar akses konten pornografi sebanyak 60 orang (56,1%). Sejalan dengan penelitian Fatira bahwa ada hubungan paparan audio visual dengan kejadian *menarche*. Begitu pula penelitian Yazia yang menyebutkan bahwa ada hubungan bermakna antara keterpaparan media internet dengan usia *menarche*.^{12,13}

Hasil penelitian menunjukkan bahwa variabel yang paling bermakna berpengaruh terhadap usia *menarche* yaitu status gizi. Status gizi memiliki nilai wald sebesar 8,428 dan nilai signifikan sebesar 0,004. Didukung penelitian oleh Wahyuningsih yang diketahui bahwa status gizi merupakan faktor yang paling berhubungan dengan usia *menarche*. Siswi dengan status gizi normal memiliki risiko sebesar 3 kali untuk *menarche* lebih cepat dibanding status gizi kurang. Sejalan dengan penelitian lain yang juga menunjukkan status gizi merupakan faktor yang paling dominan mempengaruhi umur *menarche*.¹⁴

PENUTUP

A. KESIMPULAN

Berdasarkan hasil penelitian dan pembahasan, maka dapat ditarik kesimpulan sebagai berikut:

1. Karakteristik siswi di SMP N 4 Samigaluh mayoritas usia *menarche* kategori normal (93,5%), status gizi kategori normal (68,2%), dan usia *menarche* ibu kategori normal (96,3%). Status sosial ekonomi kategori

rendah (72,9%), pendidikan ayah kategori rendah (55,1%) dan pendidikan ibu kategori rendah (55,1%). Paparan audiovisual dilihat dari akses konten pornografi sebagian besar kategori tidak terpapar (56,1%) dan penggunaan smarphone kategori sebelum *menarche* (71,0%)

2. Ada hubungan status gizi dengan usia *menarche* ($P=0,000$).
3. Ada hubungan usia *menarche* ibu dengan usia *menarche* ($P=0,021$).
4. Tidak ada hubungan pendidikan ayah dengan usia *menarche* ($P=0,698$), tidak ada hubungan pendidikan ibu dengan usia *menarche* ($P=0,239$) dan ada hubungan penghasilan orangtua dengan usia *menarche* ($P=0,000$).
5. Ada hubungan akses konten pornografi dengan usia *menarche* ($P=0,002$), dan tidak ada hubungan penggunaan smartphone dengan usia *menarche* ($P=0,105$).
6. Variabel yang paling bermakna yang berpengaruh terhadap usia *menarche* adalah status gizi dengan nilai signifikan sebesar 0,004.

B. SARAN

Berdasarkan kesimpulan di atas, maka saran yang dapat diberikan sebagai berikut:

1. Bagi Bidan

Penelitian ini dapat digunakan sebagai bahan masukan bagi bidan untuk membuat perencanaan kesehatan mengenai perkembangan reproduksi remaja. Bidan dan tenaga kesehatan dapat dilakukan penyuluhan tentang kesehatan reproduksi remaja.

2. Bagi siswi

Memberikan informasi pada siswi khususnya siswi SMP N 4 Samigaluh mengenai faktor-faktor yang mempengaruhi usia *menarche*, sehingga siswa lebih peduli dengan kesehatan reproduksinya dan menjaga kesehatan reproduksinya. Bagi siswi dapat menjaga pola makan dan jenis makanan lain yang mengandung lemak yang tinggi serta mengkonsumsi lebih banyak serat agar pertumbuhan dan perkembangan khususnya pertumbuhan dan perkembangan terkait sistem reproduksi

(seksual) tetap berjalan sebagaimana mestinya.

3. Bagi Peneliti Selanjutnya

Peneliti selanjutnya dapat melakukan penelitian lebih lanjut tentang factor-faktor lain yang berhubungan dengan usia *menarche*. Faktor lain diantaranya konsumsi *junk food* dan aktivitas fisik.

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PUBLISHED PAPER

**FACTORS AFFECTING EARLY MENARCHE IN STUDENTS OF SMP N
4 SAMIGALUH SAMIGALUH DISTRICT IN 2021**



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2020**

MENTOR'S APPROVAL

PUBLISHED PAPER
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SAMIGALUH DISTRICT IN 2021

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FACTORS AFFECTING EARLY MENARCHE IN STUDENTS OF SMP N 4 SAMIGALUH SAMIGALUH DISTRICT IN 2021

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ABSTRACT

Background : *Menarche* The early of physical development is too fast so that it can increase the occurrence of various health disorders, psychological disorders and reproductive health problems. This is influenced by several influencing factors such as nutritional status, maternal age at menarche, socioeconomic status and exposure to audiovisual media.

Purpose : This study is subject to determine the factors that influence early menarche in students of State Junior High School 4 Samigaluh, Samigaluh District.

Method : This study applies a quantitative method with a cross sectional design. The population in this study were female students at State Junior High School 4 Samigaluh. The sampling technique with total sampling based on inclusion and exclusion criteria was 107 respondents. The instrument used to collect data is a questionnaire that has been tested for validity and reliability. Data analysis used chi-square test for bivariate analysis and logistic regression test for multivariate analysis

Result : The results showed that there was a relationship between nutritional status and age at menarche ($P=0.000$), there was a relationship between maternal age at menarche and menarche age at ($P=0.021$), there is no relationship between father's education and age at menarche ($P=0.698$), there was no relationship between maternal education and menarche age ($P=0,239$) and there was a relationship between parental income and menarche age ($P=0,000$), there was a relationship between access to pornographic content and age at menarche ($P=0,002$), and there was no relationship between smartphone use and age at menarche ($P=0,105$). The most significant variable that affects menarche age is nutritional status with a significant value of 0.004.

Conclusion: The factors that influence early menarche in students of State Junior High School 4 Samigaluh, Samigaluh District, are nutritional status factors, maternal age at menarche, parental income and access to pornographic content.

Keywords: early menarche, nutritional status, maternal menarche age, parental income, access to pornographic content.

***Factors Affecting Early Menarche In Students Of SMP N 4 Samigaluh
Samigaluh District In 2021***

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ABSTRACT

Background: *Early menarche makes physical development too fast so that it can increase the occurrence of various health problems, psychological disorders and reproductive health problems. This can be influenced by several influencing factors such as nutritional status, mothers' menarche age, socioeconomic status and exposure to audiovisual media*

Objective: *This study aims to know factors affecting early menarche among students in junior high school 4 Samigaluh district of Samigaluh year 2021.*

Method: *This study used a quantitative research with cross sectional design. The population in this study were female students in junior high school 4 Samigaluh. Sampling technique used total sampling as many 107 respondents. The instrument used to collect data is a questionnaire that has been tested for validity and reliability. Bivariate analysis used chi square test while multivariate test used logistic regression.*

Result: *There was correlation between nutritional status and menarche age ($P=0,000$). There was correlation between mothers' menarche age and menarche age ($P=0,021$). There was no correlation between father's education and menarche age ($P=0,698$), there was no correlation between mother's education and menarche age ($P=0,239$) and there was correlation between parent's income and menarche age ($P=0,000$). There was correlation between pornographic content access and menarche age ($P=0,002$), and there was no correlation between smartphone use and menarche age ($P=0,105$). The most affecting variable toward menarche age was nutritional status with significant value 0,004.*

Conclusion: *factors affecting early menarche among students in junior high school 4 Samigaluh district of Samigaluh year 2021 were nutritional status, mothers' menarche age, parent's income and pornographic content access.*

Keywords: *early menarche, factors, nutritional status, parent's income, pornographic content acces.*

PRELIMINARY

Data from the World Health Organization (WHO) shows the group of adolescents aged 10-19 years amounted to 1.2 billion or 18 percent of the world's population. The 2018 people's welfare statistics show the number of female population aged 10-19 years is 22 million or 16.71 percent of the total population of Indonesia. The number of teenagers from the Special Region of Yogyakarta (DIY) aged 10-19 years based on data from the Central Statistics Agency (BPS) DIY in 2019 was 535,048 people or around 14.07 percent of the total population in DIY. The number of girls aged 10-19 years is 261,144 or about 49 percent of the total youth aged 10-19 years.^{1,2,3}

The results of the 2017 Indonesian Youth Demographic Health Survey (IDHS) show that menarche age for Indonesian women is 2% less than 10 years old, 7% of 11 years old, 12% of 12 years old, 27.7% 13 years old, 14 years as much as 22.9%, age 15 years as much as 10.9%, age 16 years as much as 2.3%, age 17 years as much as 3.6%. Based on the 2017 IDHS data, there are 2% of adolescent girls who experience early menarche.⁴

Indonesia is experiencing a shift in menarche age to a younger age. The 2012 Indonesian Health Demographic Survey (IDHS) stated that 7% of adolescents experiencing menarche aged 11 years were 9%, while the results of the 2017 IDHS stated that adolescents who experienced menarche aged 11 years were 9%.^{4,5}

The early menarche age makes physical development too fast. This can increase the occurrence of various health problems, psychological disorders and reproductive health problems. The shift in menarche age which tends to occur at a younger age results in increased sexual activity at an early age, and has a high risk of sexual harassment, sexually transmitted diseases and pregnancy at an increasing age. The impact of early menarche will indirectly increase the risk of teenage pregnancy which can lead to abortion so that it can affect the maternal mortality rate.⁴

Nutritional status is a factor that affects the occurrence of menarche. The results showed that respondents with overweight/obese were 29.9% and those

who experienced early menarche were 44%. The results of the analysis showed that there was a significant relationship between nutritional status and the incidence of early menarche in students of State Junior High School 4 Metro. Respondents who are overweight are at risk of experiencing early menstruation by 2.45 times greater than normal or thin female students (POR = 2.45).⁵

Based on the results of a preliminary survey conducted to 30 students in grades VII and VIII of SMP N 4 Samigaluh, it was found that 3 students had not experienced menstruation, experienced their first menstruation at the age of 10-11 years, a total of 7 students, aged 12-13 years, 14 students, aged 14. -15 years 6 students. State Junior High School 4 Samigaluh is one of the schools that has the most students in the Samigaluh sub-district and has a variety of student characteristics from family backgrounds and economic status. The choice of location at State Junior High School 4 Samigaluh was due to the location of the school being in the same complex as the Vocational High School (SMK). Junior high school students who are mostly teenagers in the category of early teens aged 11-14 years will allow them to interact more and imitate the behaviors of students who attend higher levels of schooling. This of course will affect the behavior and psychology of the students of State Junior High School 4 Samigaluh. Based on the description above, the researchers are interested in conducting research on the Factors Affecting Early Menarche Age in State Junior High School 4 Samigaluh, Samigaluh District.

METHOD

This type of research is quantitative research, namely research data in the form of numbers and analyzed using statistics. Research This research is carried out using a quantitative approach with a cross sectional research design, which is a study in which the researcher observes or measures variables at a certain time and does not follow up on the measurements made. The population in the study is a large number of subjects who have certain characteristics. The population in this study are State Junior High School 4 Samigaluh students who were menstruated.⁶ The total population in this study was 111 female students.

RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Student Characteristics at State Junior High School 4 Samigaluh, Samigaluh District

Characteristics	Frequency	Percentage (%)
Menarche age		
Early (≤ 10 years)	7	6.5
Normal (11-15 years old)	100	93.5
Nutritional status		
Malnutrition	22	20.6
Normal nutrition	73	68.2
More nutrition	9	8.4
Obesity	3	2.8
Mother's menarche age		
Early	4	3.7
Normal	103	96.3
Parents' Income		
Low ($\leq 1,000,000$)	78	72.9
Medium (Rp 1,000,000 – Rp 1,800,000)	14	13.1
High (\geq Rp 1,800,000)	15	14.0
Father's Education		
Low ($<$ SMA/SMK)	59	55.1
Height ($>$ SMA/SMK)	48	44.9
Mother's Education		
Low ($<$ SMA/SMK)	59	55.1
Height ($>$ SMA/SMK)	48	44.9
Access to pornographic content via smartphone		
Exposed	47	43.9
Not exposed	60	56.1
First age using smartphone		
Before menarche	76	71.0
After menarche	31	29.0
Total	107	100

Based on table 4. shows that menarche age of the majority of female students is normal as many as 100 people (93.5%), normal nutritional status is 73 people (68.3%) and the majority of women's age at menarche is normal category as many as 103 people (96.3%). The majority of the parents' socioeconomic status was in the low category as many as 78 people (72.9%), the education of both fathers and mothers was

in the low category, namely 59 people (55.1%). The majority of students access pornographic content in the unexposed category as many as 60 people (56.1%) and the majority of smartphone use before menarche as many as 76 people (71.0%).

Table 2. Cross Tabulation Characteristics of Respondents by Menarche age in Students at SMP N 4 Samigaluh, Samigaluh District.

VARIABEL	<i>Usia Menarche</i>						P-value
	Dini		Normal		Total		
	N	%	N	%	N	%	
Status Gizi							
Gizi kurang	0	0,0	22	20,6	22	20,6	0,000
Gizi normal	1	0,9	72	67,3	73	68,2	
Gizi lebih	5	4,7	4	3,7	9	8,4	
Obesitas	1	0,9	2	1,9	3	2,8	
Usia <i>Menarche</i> Ibu							
Dini	2	1,9	2	1,9	4	3,7	0,021
Normal	5	4,7	98	91,6	103	96,3	
Penghasilan Orang Tua							
Rendah	1	0,9	77	72,0	78	72,9	0,000
Sedang	1	0,9	13	12,1	14	13,1	
Tinggi	5	4,7	10	9,3	15	14,0	
Pendidikan Ayah							
Rendah	3	2,8	56	52,3	59	55,1	0,698
Tinggi	4	3,7	44	41,1	48	44,9	
Pendidikan Ibu							
Rendah	2	1,9	57	53,3	59	55,1	0,239
Tinggi	5	4,7	43	40,2	48	44,9	
Akses terhadap konten pornografi melalui smartphone							
Terpapar	7	6,5	40	37,4	47	43,9	0,002
Tidak terpapar	0	0,0	60	56,1	60	56,1	
Usia pertama menggunakan smartphone							
Sebelum <i>menarche</i>	7	6,5	69	64,5	76	71,0	0,105
Setelah <i>menarche</i>	0	0,0	31	29,0	31	29,0	

Based on table 5. shows that the majority of students with early menarche age have more nutritional status as many as 5 people (4.7%), while students with normal menarche age have normal nutritional status as

many as 72 people (67.3%). Based on the chi-square analysis, the significance value of the p-value is 0.000 ($p < 0.05$). This means that there is a relationship between nutritional status and age at menarche.

The results showed that menarche age in the early category of female students with the normal menarche age was 5 people (4.7%), while menarche age in the normal category of female students with the age of maternal menarche was also in the normal category of 98 people (91.6%). the significance of the p-value is 0.021 ($p < 0.05$). This means that there is a relationship between maternal age at menarche and student age at menarche.

The results showed that the majority of students at the early menarche age had a high category of economic status as many as 5 people (4.7%), while the normal menarche age in the normal category had a low category of economic status as many as 77 people (72.0%). values of 0.000($p < 0.05$). This means that there is a relationship between socioeconomic status and menarche age .

This study shows that there are 4 students who experience early menarche with a high father's education (3.7%), and 56 people who experience menarche in the normal category with a low father's education (52.3%). Based on the chi-square calculation, the significance value of the p-value is 0.499 ($p > 0.05$). This means that there is no relationship between father's education and menarche age of students.

There were 5 students who experienced menarche in the early category with high maternal education (4.7%), and 57 students (53.3%). Based on the chi-square calculation, the significance value of the p-value is 0.239 ($p > 0.05$). This means that there is no relationship between mother's education and menarche age of students.

The results showed that students who experienced menarche in the early category were exposed to access to pornographic content as many as 7 people (6.5%), and while menarche in the normal category, the majority were not exposed to access to pornographic content as many as 60 people

(56.1%). Based on the chi-square calculation, the significance value of p-value is 0.002 ($p < 0.05$). This means that there is a relationship between access to pornographic content and menarche age of students.

The results showed that the students who experienced early menarche and used smartphones before menarche were 7 people (6.5%), while the normal menarche age was 69 people (64.5%). Based on the chi-square calculation, the significance value of the p-value is 0.105 ($p > 0.05$). This means that there is no relationship between smartphone use and menarche age of students.

Table 3. First Age of Smartphone Use

First Age of Smartphone Use	frequency	Percentage(%)
<10 YEARS	15	14
10-12 YEARS	50	46
>12 YEARS	42	39

Table 4. Use of Smartphones in a Day

Smartphone usage in a day	Frequency	Percentage(%)
<4 TIMES	30	28
5-6 TIMES	56	52
>7 TIMES	21	20

Table 5. Smartphone Usage Duration

Duration of Smartphone Use in a day	frequency	Percentage (%)
<6 HOURS	11	10.2
6-7 HOURS	36	33.6
>7 HOURS	60	56.2

Table 6. Internet Quota Usage

Internet Quota Usage	frequency	Percentage (%)
<2GB	22	20.5
2-4GB	44	41.2
>4GB	41	38.3

Table 7. Type of Application Owned

Type of Application Owned	Frequency	Percentage (%)
WhatsApp	107	100
Telegram	25	23.3
Facebook	75	70
Instagram	62	57.9
Youtube	74	69.1
Tiktok	72	67.2

The table data above shows that the first age to use a smartphone is at the age of 10-12 years (46%). The most smartphone use in a day is 5-6 times (52%). The maximum duration is more than 7 hours (56.2%) with 2-4 GB quota usage of 41.2%. The type of social media application that most students have is WhatsApp because all students have a WhatsApp account and the second and third ranks are Youtube (69.1%) and Tiktok (67.2%)

Table 8. Logistic Regression Factors Affecting Menarche age in Students at SMP N 4 Samigaluh, Samigaluh District

Variable	P-value	Exp(B)	95% CI	
			Lower	Upper
Constants				
Socio-Economic	0.013	0.086	0.012	0.601
Nutritional status	0.004	0.042	0.0042	0.356

Description: Step 6

Based on table 6 above, the results of the logistic regression analysis show that socioeconomic status and nutritional status are significantly related to age at menarche. The most significant factor that affects menarche age in female students at SMP N 4 Samigaluh is nutritional status, a significant value of 0.004 with Exp (B) of 0.042 (CI95% 0.005-0.356).

The majority of students' age at menarche was in the normal

category (93.5%). In line with previous research by Napitupulu that 50.8% of menarche age respondents were in the normal category. Gultom's research also stated that 55.4% of respondents experienced menarche in the normal category. It is also in line with Suhartini's research that 65% of menarche age in junior high school students is in the normal category.^{7,8,9}

Students with early menarche age have higher nutritional status as many as 5 people (4.7%), while students with normal age at menarche category had normal nutritional status as many as 72 people (67.3%). In this study it was found that there was a relationship between nutritional status and age at menarche p-value of 0.000 ($p < 0, 05$).

The results showed that most of menarche age in the early category of female students with the normal menarche age were 5 people (4.7%), while menarche age in the normal category of female students with the age of maternal menarche was also in the normal category as many as 98 people (91.6%). showed that there was a relationship between maternal age at menarche and female students' menarche age , p-value of 0.021 ($p < 0.05$). In line with research conducted by Mariane on students of SMP Negeri 1 Salatuhu, it shows that there is a relationship between maternal age at menarche and age at menarche.¹⁰

The majority of students at the early menarche age category had a high category of economic status as many as 5 people (4.7%), while the normal menarche age in the normal category had a low category of economic status as many as 77 people (72.0%). Based on chi-square analysis, a significant value-value was 0.000 ($p < 0.05$). This means that there is a relationship between socioeconomic status and age at menarche. Indrayani's research results show that the higher the economic status, the younger the initial menarche age . Sufficient socio-economic conditions relate to purchasing power and ease of obtaining food.¹¹

In the variable of exposure to audiovisual media, it is known that a significant value is 0.002 which indicates that there is a relationship between access to pornographic content and age at menarche. The

majority of menarche age is in the early category, exposed to access to pornographic content as many as 7 people (6.5%), and while the age at menarche is in the normal category, the majority are not exposed to access to pornographic content as much as 60. people (56.1%). In line with Fatira's research that there is a relationship between audio-visual exposure and the incidence of menarche. Likewise, Yazia's research states that there is a significant relationship between internet media exposure and age at menarche.^{12,13}

The results showed that the most significant variable affecting menarche age was nutritional status. Nutritional status had a Wald value of 8.428 and a significant value of 0.004. Supported by research by Wahyuningsih, it is known that nutritional status is the factor most related to the menarche age . Students with normal nutritional status have a risk of 3 times faster menarche than those with less nutritional status. In line with other studies which also show nutritional status is the most dominant factor influencing the menarche age .¹⁴

CLOSING

A. CONCLUSION

Based on the results of research and discussion, the following conclusions can be drawn:

1. The characteristics of students at SMP N 4 Samigaluh are the majority of the age at menarche in the normal category (93.5%), nutritional status in the normal category (68.2%), and the age at menarche in the normal category (96.3%). Socio-economic status is in the low category (72.9%), the father's education is in the low category (55.1%) and the mother's education is in the low category (55.1%). Audiovisual exposure seen from access to pornographic content most of the categories were not exposed (56.1%) and smartphone use in the pre-menarche category (71.0%)
2. There is a relationship between nutritional status and age at menarche (P=0.000).

3. There was a relationship between maternal age at menarche and age at menarche ($P=0.021$).
4. There was no relationship between father's education and age at menarche ($P=0.698$), there was no relationship between mother's education and age at menarche ($P=0.239$) and there was a relationship between parental income and age at menarche ($P=0.000$).
5. There is a relationship between access to pornographic content and age at menarche ($P=0.002$), and there is no relationship between smartphone use and age at menarche ($P=0.105$).
6. The most significant variable that affects menarche age is nutritional status with a significant value of 0.004.

B. SUGGESTION

Based on the conclusions above, the following suggestions can be given:

1. For Midwives

This research can be used as input for midwives to make health plans regarding adolescent reproductive development. Midwives and health workers can provide counseling about adolescent reproductive health.

2. For students

Provide information to students, especially students of SMP N 4 Samigaluh about the factors that affect the menarche age, so that students are more concerned with their reproductive health and maintain their reproductive health. For students, they can maintain their diet and other types of foods that contain high fat and consume more fiber so that growth and development, especially growth and development related to the reproductive (sexual) system, continues to run as it should.

3. For Further Researchers

Next researcher can conduct further research on other factors that related to the menarche age. Other factors include consumption of junk food and physical activity.

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