

Table 1: Distribution of study population based on groups

Study Population	No	%
Marble Mining employees (Study group)	500	51.02
General Population (Comparative group)	480	48.98
Total	980	100

Table 2: Distribution of marble mining labourers based on work units

Mining employees (M.E)	No	%
Administrative unit (A)	43	8.60
Maintenance unit (M)	45	9.00
Transportation unit (T)	140	28.00
Cutting unit (C)	140	28.00
Polishing unit (P)	132	26.40
Total	500	100

Table 3: Distribution of study population according to age groups in years

Age group (in yrs)	Mining employees (M.E)					M.E - Total	G.P	Total	
	A	M	T	C	P				
15-24	No	5	8	26	22	26	87	68	155
	%	11.63	17.78	18.57	15.71	19.70	17.40	14.17	15.82
25-34	No	20	27	86	60	69	262	230	492
	%	46.51	60.00	61.43	42.86	52.27	52.40	47.92	50.20
35-44	No	13	7	24	38	37	119	140	259
	%	30.23	15.56	17.14	27.14	28.03	23.80	29.17	26.43
45 -54	No	5	3	4	20	0	32	42	74
	%	11.63	6.67	2.86	14.29	0.00	6.40	8.75	7.55
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Intra group - M.E: $\chi^2 = 39.886$, $df = 12$, $P = 0.000 (<0.001)$ (VHS) Cramer's V = 0.163									
Inter group (M.E. Vs G.P.): $\chi^2 = 7.059$, $df = 3$, $P = 0.070 (> 0.05)$ (Not Sig.) Cramer's V= 0.085									
*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C- Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population									

Table 4: Distribution of study population according to literacy levels

Literacy Levels		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Illiteracy	No	2	6	105	100	100	313	99	412
	%	4.65	13.33	75.00	71.43	75.76	62.60	20.63	42.04
Primary	No	4	7	25	5	8	49	60	109
	%	9.30	15.56	17.86	3.57	6.06	9.80	12.50	11.12
High school	No	8	8	5	20	15	56	116	172
	%	18.60	17.78	3.57	14.29	11.36	11.20	24.17	17.55
PUC	No	10	12	5	15	9	51	90	141
	%	23.26	26.67	3.57	10.71	6.82	10.20	18.75	14.39
Diploma	No	10	12	0	0	0	22	40	62
	%	23.26	26.67	0.00	0.00	0.00	4.40	8.33	6.33
Degree	No	9	0	0	0	0	9	75	84
	%	20.93	0.00	0.00	0.00	0.00	1.80	15.63	8.57
Total	No	43	45	140	140	132	500	480	980
	%	100	100	100	100	100	100	100	100
<p>Intra group - M.E: $\chi^2 = 269.79$, $df = 20$, $P = 0.000 (<0.001)$ (VHS) Cramer's V = 0.367</p>									
<p>Inter group (M.E. Vs G.P.): $\chi^2 = 200.741$, $df = 5$, $P = 0.000 (<0.001)$ (VHS) Cramer's V= 0.453</p>									
<p>*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population</p>									

**Table 5: Distribution of study population according to socio economic status (SES) –
(Modified Kuppaswamy’s SES Classification Scale)**

SES Classification		Mining employees					M.E – Total	G.P	Total
		A	M	T	C	P			
Upper	No	2	0	0	0	0	2	20	22
	%	4.65	0.00	0.00	0.00	0.00	0.40	4.17	2.24
Upper middle	No	26	12	0	8	0	46	64	110
	%	60.47	26.67	0.00	5.71	0.00	9.20	13.33	11.22
Middle	No	15	33	5	72	70	195	160	355
	%	34.88	73.33	3.57	51.43	53.03	39.00	33.33	36.22
Upper lower	No	0	0	40	56	56	152	166	318
	%	0.00	0.00	28.57	40.00	42.42	30.40	34.58	32.45
Lower	No	0	0	95	4	6	105	70	175
	%	0.00	0.00	67.86	2.86	4.55	21.00	14.58	17.86
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Intra group - M.E: $\chi^2 = 467.054$, df = 16, P = 0.000 (<0.001) (VHS)
Cramer's V = 0.483

Inter group (M.E. Vs G.P.): $\chi^2 = 28.343$, df = 4, P = 0.000 (<0.001) (VHS)
Cramer's V = 0.170

***A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population**

Table 6: Distribution of study population according to diet

Diet		Mining employees					M.E – Total	G.P	Total
		A	M	T	C	P			
Veg	No	30	24	32	58	57	201	181	382
	%	69.77	53.33	22.86	41.43	43.18	40.20	37.71	38.98
Mixed	No	13	21	108	82	75	299	299	598
	%	30.23	46.67	77.14	58.57	56.82	59.80	62.29	61.02
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Intra group - M.E: $\chi^2 = 36.959$, df = 4, P = 0.000 (<0.001) (VHS)
Cramer's V = 0.272

Inter group (M.E. Vs G.P.): $\chi^2 = 0.639$, df = 1, P = 0.424 (>0.05) (Not Sig.)
Cramer's V = 0.026

***A - Administrative; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population**

Table 7: Distribution of study population according to sweet consumption

Sweet consumption		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
No sweet	No	10	9	15	10	12	56	50	106
	%	23.26	20.00	10.71	7.14	9.09	11.20	10.42	10.82
Daily	No	3	5	26	11	12	57	46	103
	%	6.98	11.11	18.57	7.86	9.09	11.40	9.58	10.51
2-3 times /week	No	10	10	30	30	26	106	180	286
	%	23.26	22.22	21.43	21.43	19.70	21.20	37.50	29.18
Occasionally	No	20	21	69	89	82	281	204	485
	%	46.51	46.67	49.29	63.57	62.12	56.20	42.50	49.49
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Intra group - M.E: $\chi^2 = 25.588$, df = 12, P = 0.012 (<0.05) (S)
Cramer's V = 0.131

Inter group (M.E. Vs G.P.): $\chi^2 = 32.491$, df = 3, P = 0.000 (<0.001) (VHS)
Cramer's V = 0.182

*A - Administrative; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 8A: Distribution of study population according to use of tobacco products

Tobacco use		Mining employees(M.E)					M.E - Total	G.P	Total
		A	M	T	C	P			
User	No	33	37	120	105	102	397	296	693
	%	76.74	82.22	85.71	75.00	77.27	79.40	61.67	70.71
Non-user	No	10	8	20	35	30	103	184	287
	%	23.26	17.78	14.29	25.00	22.73	20.60	38.33	29.29
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Intra group - M.E: $\chi^2 = 5.839$, df = 4, P = 0.211 (>0.05) (Not Sig)
Cramer's V = 0.108

Inter group (M.E. Vs G.P.): $\chi^2 = 37.188$, df = 1, P = 0.000 (<0.001) (VHS)
Cramer's V = 0.195

*A - Administrative; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 8B: Distribution of study population according to type of tobacco products and alcohol use

Tobacco use		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Cigarette	No	08	04	10	00	00	22	30	52
	%	18.60	8.89	7.14	0.00	0.00	4.40	6.25	5.31
Bidi	No	01	08	08	25	38	80	66	146
	%	2.33	17.78	5.71	17.86	28.79	16.00	13.75	14.90
Tobacco leaf	No	08	10	28	25	25	96	74	170
	%	18.60	22.22	20.00	17.86	18.94	19.20	15.42	17.35
Pan	No	04	00	01	00	01	06	20	26
	%	9.30	0.00	0.71	0.00	0.76	1.20	4.17	2.65
Gutkha	No	12	15	73	55	38	193	106	299
	%	27.91	33.33	52.14	39.29	28.79	38.60	22.08	30.51
Alcohol	No	28	33	110	125	108	404	290	694
	%	65.12	73.33	78.57	89.29	81.82	80.80	60.42	70.82
<p>Cigarette: Intra group - M.E: $\chi^2 = 37.805$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V= 0.275 Inter group (M.E. Vs G.P.): $\chi^2 = 1.668$, df = 1, P = 0.197 (>0.05) (Not Sig.) Cramer's V= 0.041</p>									
<p>Bidi: Intra group - M.E: $\chi^2 = 33.529$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V= 0.259 Inter group (M.E. Vs G.P.): $\chi^2 = 0.978$, df = 1, P = 0.323 (>0.05) (Not Sig.) Cramer's V= 0.032</p>									
<p>Tobacco leaf: Intra group - M.E: $\chi^2 = 0.501$, df = 4, P = 0.973 (>0.05) (Not Sig.) Cramer's V= 0.032 Inter group (M.E. Vs G.P.): $\chi^2 = 2.445$, df = 1, P = 0.118 (>0.05) (Not Sig.) Cramer's V= 0.050</p>									
<p>Pan: Intra group - M.E: $\chi^2 = 26.553$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V= 0.230 Inter group (M.E. Vs G.P.): $\chi^2 = 8.346$, df = 1, P = 0.004 (<0.01) (HS) Cramer's V= 0.092</p>									
<p>Gutkha: Intra group - M.E: $\chi^2 = 18.825$, df = 4, P = 0.001 (<0.01) (HS) Cramer's V= 0.194 Inter group (M.E. Vs G.P.): $\chi^2 = 31.511$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V= 0.179</p>									
<p>Alcohol: Intra group - M.E: $\chi^2 = 15.470$, df = 4, P = 0.004 (<0.01) (HS) Cramer's V= 0.176 Inter group (M.E. Vs G.P.): $\chi^2 = 49.234$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V= 0.224</p>									

Table 9: Distribution of study population according to their oral hygiene habits

		Mining employees					M.E – Total	G.P	Total
		A	M	T	C	P			
Frequency of cleaning									
Once	No	43	45	129	102	100	419	430	849
	%	100.00	100.00	92.1	72.8	75.7	100.00	97.73	98.84
Twice	No	0	0	0	0	0	0	10	10
	%	0.00	0.00	0.00	0.00	0.00	0.00	2.27	1.16
After every meal	No	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	No	43	45	129	102	100	419	440	859
	%	100.00	100.00	92.1	72.8	75.7	100.00	100.00	100.00
Mechanical aids used for cleaning									
Brush	No	41	37	60	70	80	288	377	665
	%	95.35	82.22	46.51	68.63	80.00	68.74	85.68	77.42
Finger	No	2	7	39	23	17	88	51	139
	%	4.65	15.56	30.23	22.55	17.00	21.00	11.59	16.18
Others	No	0	1	30	9	3	43	12	55
	%	0.00	2.22	23.26	8.82	3.00	10.26	2.73	6.40
Total	No	43	45	129	102	100	419	440	859
	%	100	100	100	100	100	100	100	100
Material used for cleaning									
Nil	No	0	0	18	10	8	36	6	35
	%	0.00	0.00	13.95	9.80	8.00	8.59	1.36	4.89
Paste	No	38	37	81	72	74	302	330	685
	%	88.37	82.22	62.79	70.59	74.00	72.08	75.00	73.57
Powder	No	4	5	16	10	10	45	66	109
	%	9.30	11.11	12.40	9.80	10.00	10.74	15.00	12.92
Others	No	1	3	14	10	8	36	38	72
	%	2.33	6.67	10.85	9.80	8.00	8.59	8.64	8.61
Total	No	43	45	129	102	100	419	440	980
	%	100	100	100	100	100	100	100	100
Frequency of cleaning:									
Intra group - M.E: $\chi^2 =$ Not applicable as frequency of cleaning in all the sub-groups is “once”									
Cramer's V = Not applicable									
Inter group (M.E. Vs G.P.): $\chi^2 = 7.761$, df = 1, P = 0.005 (<0.01) (HS)									
Cramer's V= 0.095									
Mechanical aids used for cleaning:									
Intra group - M.E: $\chi^2 = 62.773$, df = 8, P = 0.000 (<0.001) (VHS)									
Cramer's V = 0.274									
Inter group (M.E. Vs G.P.): $\chi^2 = 38.743$, df = 2, P = 0.000 (<0.001) (VHS)									
Cramer's V= 0.212									
Material used for cleaning:									
Intra group - M.E: $\chi^2 = 14.979$, df = 12, P = 0.243 (>0.05) (Not Sig.)									
Cramer's V = 0.109									
Inter group (M.E. Vs G.P.): $\chi^2 = 26.198$, df = 3, P = 0.000 (<0.001) (VHS)									
Cramer's V= 0.175									

*A – Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 10: Distribution of the Marble Mining employees according to use of personal protective measures (PPM)

PPM		Mining employees					Total
		A	M	T	C	P	
Face cloth							
Using Face cloth	No	0	6	8	9	10	33
	%	0.00	13.33	5.71	6.43	7.58	6.60
Not using Face cloth/mask	No	43	39	132	131	122	467
	%	100.00	86.67	94.29	93.57	92.42	93.40
Total	No	43	45	140	140	132	500
	%	100	100	100	100	100	100
Ear plug							
Using Ear plugs	No	0	8	5	8	6	27
	%	0.00	17.78	3.57	5.71	4.55	5.40
Not using Ear plugs	No	43	37	135	132	126	473
	%	100.00	82.22	96.43	94.29	95.45	94.60
Total	No	43	45	140	140	132	500
	%	100	100	100	100	100	100
Face cloth: $\chi^2 = 6.737$, df = 4, P = 0.150 (>0.05) (Not Sig.) Cramer's V = 0.116							
Ear plug oth: $\chi^2 = 17.083$, df = 4, P = 0.002 (<0.01) (HS) Cramer's V = 0.185							

*A – Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit

Table 11: Distribution of the Marble Mining employees according to duration of employment in the Mining.

Duration of Employment In Years		Mining employees					Total
		A	M	T	C	P	
<5	No	10	14	48	40	38	150
	%	23.26	31.11	34.29	28.57	28.79	30.00
5-10	No	16	12	63	59	53	203
	%	37.21	26.67	45.00	42.14	40.15	40.60
11-15	No	10	8	8	25	28	79
	%	23.26	17.78	5.71	17.86	21.21	15.80
16-20	No	2	6	19	7	8	42
	%	4.65	13.33	13.57	5.00	6.06	8.40
>20	No	5	5	2	9	5	26
	%	11.63	11.11	1.43	6.43	3.79	5.20
Total	No	43	45	140	140	132	500
	%	100	100	100	100	100	100
$\chi^2 = 38.627$, df = 16, P = 0.001 (<0.01) (HS) Cramer's V = 0.139							

*A - Administrative; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit

Table 12: Distribution of study population according to dental visit

Dental visit		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Yes	No	26	24	31	57	48	186	228	414
	%	60.47	53.33	22.14	40.71	36.36	37.20	47.50	42.24
No	No	17	21	109	83	84	314	252	566
	%	39.53	46.67	77.86	59.29	63.64	62.80	52.50	57.76
Total	No	43	45	140	140	132	500	480	980
	%	100	100	100	100	100	100	100	100
Intra group - M.E: $\chi^2 = 29.343$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V = 0.242									
Inter group (M.E. Vs G.P.): $\chi^2 = 10.649$, df = 1, P = 0.001 (<0.01) (HS) Cramer's V = 0.104									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 13: Distribution of study population according to reasons for dental visit

Reasons for dental visit		Mining employees					M.E – Total	G.P	Total
		A	M	T	C	P			
Extraction	No	9	10	28	40	33	120	130	250
	%	34.62	41.67	90.32	70.18	68.75	64.52	57.02	60.39
Replacement of teeth	No	5	3	1	2	2	13	22	35
	%	19.23	12.50	3.23	3.51	4.17	6.99	9.65	8.45
Restoration	No	5	6	2	8	6	27	65	92
	%	19.23	25.00	6.45	14.04	12.50	14.52	28.51	22.22
Cleaning	No	4	3	0	5	6	18	3	21
	%	15.38	12.50	0.00	8.77	12.50	9.68	1.32	5.07
Others	No	3	2	0	2	1	8	8	16
	%	11.54	8.33	0.00	3.51	2.08	4.30	3.51	3.86
Total	No	26	24	31	57	48	186	228	414
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Within Mining Employees:					Between Mining employees and General Population:				
Extraction - $\chi^2 = 25.819$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V = 0.372					$\chi^2 = 2.408$, df = 1, P = 0.121 (>0.05) (Not Sig.) Cramer's V = 0.076				
Replacement- $\chi^2 = 5.741$, df = 4, P = 0.219 (>0.05) (Not Sig.) Cramer's V = 0.176					$\chi^2 = 0.936$, df = 1, P = 0.333 (>0.05) (Not Sig.) Cramer's V = 0.048				
Restoration - $\chi^2 = 2.612$, df = 4, P = 0.625 (>0.05) (Not Sig.) Cramer's V = 0.119					$\chi^2 = 11.604$, df = 1, P = 0.001 (<0.01) (HS) Cramer's V = 0.167				
Cleaning - $\chi^2 = 2.922$, df = 4, P = 0.571 (>0.05) (Not Sig.) Cramer's V = 0.125					$\chi^2 = 14.874$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V = 0.190				
Others - $\chi^2 = 2.712$, df = 4, P = 0.607 (>0.05) (Not Sig.) Cramer's V = 0.121					$\chi^2 = 0.173$, df = 1, P = 0.677 (>0.05) (Not Sig.) Cramer's V = 0.020				

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 14: Distribution of study population according to reasons for not visiting the dentist

Reasons for not visiting dentist		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
No Problem with my teeth	No	8	10	35	24	23	100	58	158
	%	47.06	47.62	32.11	28.92	27.38	31.85	23.02	27.92
No dentists nearby	No	4	6	8	7	10	35	30	65
	%	23.53	28.57	7.34	8.43	11.90	11.15	11.90	11.48
Lack of time/Permission	No	0	2	18	8	15	43	45	88
	%	0.00	9.52	16.51	9.64	17.86	13.69	17.86	15.55
High cost of Treatment	No	3	1	15	7	17	43	60	103
	%	17.65	4.76	13.76	8.43	20.24	13.69	23.81	18.20
Fear	No	1	2	12	15	10	40	59	99
	%	5.88	9.52	11.01	18.07	11.90	12.74	23.41	17.49
Not interested	No	1	0	21	22	9	53	0	53
	%	5.88	0.00	19.27	26.51	10.71	16.88	0.00	9.36
Total	No	17	21	109	83	84	314	252	566
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Within Mining employees:					Between Mining employees and General Population:				
No Problem with my teeth - $\chi^2 = 5.323$, df = 4, P = 0.256 (>0.05) (Not Sig.) Cramer's V = 0.130					No Problem with my teeth - $\chi^2 = 5.418$, df = 1, P = 0.020 (<0.05) (Sig.) Cramer's V = 0.147				
No dentists nearby- $\chi^2 = 11.331$, df = 4, P = 0.023 (<0.05) (Sig.) Cramer's V = 0.190					No dentists nearby- $\chi^2 = 0.079$, df = 1, P = 0.779 (>0.05) (Not Sig.) Cramer's V = 0.018				
Lack of time/Permission - $\chi^2 = 6.126$, df = 4, P = 0.190 (>0.05) (Not Sig.) Cramer's V = 0.140					Lack of time/Permission - $\chi^2 = 1.845$, df = 1, P = 0.174 (>0.05) (Not Sig.) Cramer's V = 0.086				
High cost of Treatment - $\chi^2 = 6.630$, df = 4, P = 0.157 (>0.05) (Not Sig.) Cramer's V = 0.145					High cost of Treatment - $\chi^2 = 9.609$, df = 1, P = 0.002 (<0.01) (HS) Cramer's V = 0.195				
Fear - $\chi^2 = 3.384$, df = 4, P = 0.496 (>0.05) (Not Sig.) Cramer's V = 0.104					Fear - $\chi^2 = 11.037$, df = 1, P = 0.001 (<0.01) (HS) Cramer's V = 0.209				
Not interested - $\chi^2 = 13.930$, df = 4, P = 0.008 (<0.01) (HS) Cramer's V = 0.211					Not interested - $\chi^2 = 46.929$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V = 0.432				

***A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population**

Table 15: Distribution of study population according to systemic diseases

Systemic Diseases		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Diabetes	No	5	3	15	8	5	36	24	60
	%	38.46	37.50	26.79	24.24	8.20	21.05	22.22	21.51
Hypertension	No	3	0	5	5	4	17	9	26
	%	23.08	0.00	8.93	15.15	6.56	9.94	8.33	9.32
Eye Problems	No	4	3	6	6	10	29	30	59
	%	30.77	37.50	10.71	18.18	16.39	16.96	27.78	21.15
Respiratory diseases	No	0	2	13	5	20	40	17	57
	%	0.00	25.00	23.21	15.15	32.79	23.39	15.74	20.43
Skin	No	0	0	6	3	4	13	8	21
	%	0.00	0.00	10.71	9.09	6.56	7.60	7.41	7.53
Heart	No	1	0	7	2	10	20	12	32
	%	7.69	0.00	12.50	6.06	16.39	11.70	11.11	11.47
Hearing	No	0	0	4	4	8	16	8	24
	%	0.00	0.00	7.14	12.12	13.11	9.36	7.41	8.60
Total	No	13	8	56	33	61	171	108	279
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Intra group - M.E: $\chi^2 = 19.251$, df = 24, P = 0.738 (>0.05) (Not Sig.) Cramer's V = 0.168									
Inter group (M.E. Vs G.P.): $\chi^2 = 6.102$, df = 6, P = 0.412 (>0.05) (Not Sig.) Cramer's V = 0.148									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 16: Distribution of study population according to prevalence of TMJ disorders

TMJ Disorder		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Yes	No	9	10	20	21	22	82	50	132
	%	20.93	22.22	14.29	15.00	16.67	16.40	10.42	13.47
No	No	34	35	120	119	110	418	430	848
	%	79.07	77.78	85.71	85.00	83.33	83.60	89.58	86.53
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Intra group - M.E: $\chi^2 = 2.420$, df = 4, P = 0.659 (>0.05) (Not Sig.) Cramer's V = 0.070									
Inter group (M.E. Vs G.P.): $\chi^2 = 7.522$, df = 1, P = 0.006 (<0.01) (HS) Cramer's V = 0.088									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 17: Distribution of study population according to oral mucosal lesions (OML)

Oral mucosal lesions		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
No OML	No	32	28	92	100	90	342	398	740
	%	74.42	62.22	65.71	71.43	68.18	68.40	82.92	75.51
Leukoplakia	No	5	8	28	27	15	83	37	120
	%	11.63	17.78	20.00	19.29	11.36	16.60	7.71	12.24
Lichen Planus	No	0	0	0	0	1	1	0	1
	%	0.00	0.00	0.00	0.00	0.76	0.20	0.00	0.10
Ulcer	No	3	3	5	5	14	30	17	47
	%	6.98	6.67	3.57	3.57	10.61	6.00	3.54	4.80
Abscess	No	0	3	6	4	5	18	10	28
	%	0.00	6.67	4.29	2.86	3.79	3.60	2.08	2.86
OSMF	No	3	3	9	4	7	26	18	44
	%	6.98	6.67	6.43	2.86	5.30	5.20	3.75	4.49
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<p>Intra group - M.E: $\chi^2 = 17.062$, df = 20, P = 0.649 (>0.05) (Not Sig.)</p> <p>Cramer's V = 0.092</p>									
<p>Inter group (M.E. Vs G.P.): $\chi^2 = 26.657$, df = 5, P = 0.000 (<0.001) (VHS)</p> <p>Cramer's V= 0.165</p>									

Table 18: Distribution of oral mucosal lesions according to location in oral cavity among study population

Oral mucosal lesions		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Commissures	No	1	3	9	7	5	25	3	28
	%	9.09	17.65	18.75	17.50	11.90	15.82	6.00	13.46
Lips	No	1	2	2	2	0	7	0	7
	%	9.09	11.76	4.17	5.00	0.00	4.43	0.00	3.37
Sulci	No	0	0	0	0	5	5	2	7
	%	0.00	0.00	0.00	0.00	11.90	3.16	4.00	3.37
Buccal mucosa	No	8	11	29	30	28	106	28	134
	%	72.73	64.71	60.42	75.00	66.67	67.09	56.00	64.42
Tongue	No	0	0	2	0	4	6	8	14
	%	0.00	0.00	4.17	0.00	9.52	3.80	16.00	6.73
Palate	No	1	0	0	0	0	1	3	4
	%	9.09	0.00	0.00	0.00	0.00	0.63	6.00	1.92
Alveolar ridges	No	0	1	6	1	0	8	6	14
	%	0.00	5.88	12.50	2.50	0.00	5.06	12.00	6.73
Total	No	11	17	48	40	42	158	50	208
	%	100	100	100	100	100	100	100	100
Intra group - M.E: $\chi^2 = 24.623$, df = 24, P = 0.426 (>0.05) (Not Sig.) Cramer's V = 0.197									
Inter group (M.E. Vs G.P.): $\chi^2 = 15.435$, df = 6, P = 0.017 (<0.05) (Sig.) Cramer's V = 0.272									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 19: Prevalence of leukoplakia among Mining employees and general population

Leukoplakia		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Absent	No	38	37	112	113	117	417	443	860
	%	88.37	82.22	80.00	80.71	88.64	83.40	92.29	87.76
Present	No	5	8	28	27	15	83	37	120
	%	11.63	17.78	20.00	19.29	11.36	16.60	7.71	12.24
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Intra group - M.E: $\chi^2 = 5.326$, df = 4, P = 0.255 (>0.05) (Not Sig.) Cramer's V = 0.103									
Inter group (M.E. Vs G.P.): $\chi^2 = 18.019$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V = 0.136									
*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population									

Table 20: Distribution of study population according to prevalence of dental fluorosis

Dental Fluorosis		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
No	No	16	15	30	32	35	128	230	358
	%	37.21	33.33	21.43	22.86	26.52	25.60	47.92	36.53
Yes	No	27	30	110	108	97	372	250	622
	%	62.79	66.67	78.57	77.14	73.48	74.40	52.08	63.47
Total	No	43	45	140	140	132	500	480	980
	%	100	100	100	100	100	100	100	100
Intra group - M.E: $\chi^2 = 6.346$, df = 4, P = 0.175 (>0.05) (Not Sig.) Cramer's V = 0.113									
Inter group (M.E. Vs G.P.): $\chi^2 = 52.604$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V= 0.232									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 21: Distribution of study population according to community periodontal index (CPI) scores.

CPI		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
Healthy	No	10	8	5	8	7	38	50	88
	%	23.26	17.78	3.57	5.71	5.30	7.60	10.42	8.98
Bleeding	No	5	10	20	26	28	89	116	205
	%	11.63	22.22	14.29	18.57	21.21	17.80	24.17	20.92
Calculus	No	15	16	60	44	60	195	171	366
	%	34.88	35.56	42.86	31.43	45.45	39.00	35.63	37.35
4 -5 mm	No	11	8	46	51	30	146	125	271
	%	25.58	17.78	32.86	36.43	22.73	29.20	26.04	27.65
6mm or more	No	2	3	9	11	7	32	18	50
	%	4.65	6.67	6.43	7.86	5.30	6.40	3.75	5.10
Total	No	43	45	140	140	132	500	480	980
	%	100	100	100	100	100	100	100	100
Intra group - M.E: $\chi^2 = 40.351$, df = 16, P = 0.001 (<0.01) (HS) Cramer's V = 0.142									
Inter group (M.E. Vs G.P.): $\chi^2 = 11.910$, df = 4, P = 0.018 (<0.05) (S) Cramer's V= 0.110									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 22: Distribution of study population according to loss of attachment (LOA) scores

LOA		Mining employees					M.E - Total	G.P	Total
		A	M	T	C	P			
0-3mm	No	10	11	28	33	34	116	148	264
	%	23.26	24.44	20.00	23.57	25.76	23.20	30.83	26.94
4-5mm	No	08	12	41	40	46	147	142	289
	%	18.60	26.67	29.29	28.57	34.85	29.40	29.58	29.49
6-8mm	No	11	13	37	42	32	135	136	271
	%	25.58	28.89	26.43	30.00	24.24	27.00	28.33	27.65
9-11mm	No	09	05	23	16	12	65	44	109
	%	20.93	11.11	16.43	11.43	9.09	13.00	9.17	11.12
12mm or more	No	05	04	11	09	08	37	10	47
	%	11.63	8.89	7.86	6.43	6.06	7.40	2.08	4.80
Total	No	43	45	140	140	132	500	480	980
	%	100	100	100	100	100	100	100	100
Intra group - M.E: $\chi^2 = 12.159$, df = 16, P = 0.733 (>0.05) (Not Sig.) Cramer's V = 0.078									
Inter group (M.E. Vs G.P.): $\chi^2 = 23.127$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V = 0.154									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 23: Distribution of CPI scores among user and non-user of tobacco products among study population

CPI scores		Mining employees		General Population	
		Non- users	Users	Non-users	Users
Healthy	No	30	8	44	6
	%	29.13	2.02	23.91	2.03
Bleeding	No	15	74	44	72
	%	14.56	18.64	23.91	24.32
Calculus	No	40	155	78	93
	%	38.83	39.04	42.39	31.42
4 – 5 mm	No	15	131	12	113
	%	14.56	33.00	6.52	38.18
6mm or more	No	3	29	6	12
	%	2.91	7.30	3.26	4.05
Total	No	103	397	184	296
	%	100	100	100	100
Mining employees: $\chi^2 = 91.840$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V = 0.429					
General Population: $\chi^2 = 99.866$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V = 0.456					

Table 24: Distribution of LOA scores among user and non-user of tobacco products among study population.

LOA scores		Mining employees		General Population	
		Non-User	User	Non-User	User
0-3mm	No	46	56	98	35
	%	44.66	14.11	53.26	11.82
4-5mm	No	28	124	68	88
	%	27.18	31.23	36.96	29.73
6-8mm	No	15	134	11	125
	%	14.56	33.75	5.98	42.23
9-11mm	No	09	58	05	42
	%	8.74	14.61	2.72	14.19
12mm or more	No	05	25	02	06
	%	4.85	6.30	1.09	2.03
Total	No	103	397	184	296
	%	100	100	100	100
<p>Mining employees: $\chi^2 = 50.362$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V= 0.317</p>					
<p>General Population: $\chi^2 = 140.615$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V = 0.541</p>					

Table 25: Distribution of study population according to Decayed (D), Missing (M) & Filled (F) teeth

DMF	Mining employees					M.E – Total	G.P	Total	
	A	M	T	C	P				
Decayed									
Yes	No	12	17	77	50	50	206	280	486
	%	27.91	37.78	55.00	35.71	37.88	41.20	58.33	49.59
No	No	31	28	63	90	82	294	200	494
	%	72.09	62.22	45.00	64.29	62.12	58.80	41.67	50.41
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Missing									
Yes	No	12	15	55	45	43	170	142	312
	%	27.91	33.33	39.29	32.14	32.58	34.00	29.58	31.84
No	No	31	30	85	95	89	330	338	668
	%	72.09	66.67	60.71	67.86	67.42	66.00	70.42	68.16
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Filled									
Yes	No	12	14	15	18	10	69	85	154
	%	27.91	31.11	10.71	12.86	7.58	13.80	17.71	15.71
No	No	31	31	125	122	122	431	395	826
	%	72.09	68.89	89.29	87.14	92.42	86.20	82.29	84.29
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Decayed:									
Intra group - M.E: $\chi^2 = 16.700$, df = 4, P = 0.002 (<0.01) (HS) Cramer's V = 0.183									
Inter group (M.E. Vs G.P.): $\chi^2 = 28.758$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V= 0.171									
Missing:									
Intra group - M.E: $\chi^2 = 2.798$, df = 4, P = 0.592 (>0.05) (Not Sig.) Cramer's V = 0.075									
Inter group (M.E. Vs G.P.): $\chi^2 = 2.201$, df = 1, P = 0.138 (>0.05) (Not Sig.) Cramer's V= 0.047									
Filled:									
Intra group - M.E: $\chi^2 = 24.054$, df = 4, P = 0.000 (<0.001) (VHS) Cramer's V = 0.219									
Inter group (M.E. Vs G.P.): $\chi^2 = 2.824$, df = 1, P = 0.093 (>0.05) (Not Sig.) Cramer's V= 0.054									

***A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population**

Table 26: Age wise distribution of mean number of decayed teeth among the study population

Age Group	Mean Decay	Mining employees					F.E - Total	G.P
		A	M	T	C	P		
<25 years	Mean	0.60	1.00	2.31	2.32	2.27	2.08	1.81
	S.D	0.55	1.07	1.91	1.67	1.19	1.59	1.46
25-34 years	Mean	2.05	2.44	2.94	2.33	3.58	2.85	2.50
	S.D	2.26	2.50	2.45	1.58	1.83	2.16	1.57
35-44 years	Mean	2.77	2.00	3.42	3.18	3.92	3.34	3.56
	S.D	2.20	1.41	2.24	1.81	2.31	2.12	2.29
>45 years	Mean	3.00	0.00	0.00	3.10	NA	2.41	3.00
	S.D	1.87	0.00	0.00	1.48	NA	1.86	1.86

Age group: < 25 years:
Intra group FE:- Kruskal Wallis test = 11.685, df = 4, P =0.020 (<0.05) (Sig.)
Mann Whitney U test:
A & M: MW = 16.500, P = 0.622 (>0.05) (Not Sig.)
A & T: MW = 23.000, P = 0.022 (<0.05) (Sig.)
A & C: MW = 20.500, P = 0.028 (<0.05) (Sig.)
A & P: MW = 16.500, P = 0.006 (<0.01) (Sig.)
M & T: MW = 56.500, P = 0.053 (>0.05) (Not Sig.)
M & C: MW = 46.500, P = 0.051 (>0.05) (Not Sig.)
M & P: MW = 45.500, P = 0.015 (<0.05) (Sig.)
T & C: MW = 270.500, P = 0.742 (>0.05) (Not Sig.)
T & P: MW = 304.500, P = 0.525 (>0.05) (Not Sig.)
C & P: MW = 282.500, P = 0.941 (>0.05) (Not Sig.)
Inter group (F.E. Vs G.P.): MW = 2586.000, P = 0.169 (>0.05) Not Sig.

Age group: 25-34 years:
Intra group FE:- Kruskal Wallis test = 17.846, df = 4, P =0.001 (<0.01) (HS)
Mann Whitney U test:
A & M: MW = 243.500, P = 0.558 (>0.05) Not Sig.
A & T: MW = 682.000, P = 0.143 (>0.05) Not Sig.
A & C: MW = 523.500, P = 0.387 (>0.05) Not Sig.
A & P: MW = 425.500, P = 0.008 (<0.01) (Sig.)
M & T: MW = 1024.500, P = 0.350 (>0.05) Not Sig.
M & C: MW = 764.500, P = 0.671 (>0.05) Not Sig.
M & P: MW = 615.500, P = 0.009 (<0.01) (Sig.)
T & C: MW = 2304.000, P = 0.265 (>0.05) Not Sig.
T & P: MW = 2367.500, P = 0.029 (<0.05) (Sig.)
C & P: MW = 1218.500, P = 0.000 (<0.001) (Sig.)
Inter group (F.E. Vs G.P.): MW = 26967.500, P = 0.041 (<0.05) (Sig.)

Age group: 35-44 years:
Intra group FE: - Kruskal Wallis test = 7.108, df = 4, P =0.130 (>0.05) (Not Sig.)
Mann Whitney U test: Not applicable
Inter group (F.E. Vs G.P.): MW = 7484.500, P = 0.152 (>0.05) (Not Sig.)

Age group: > 45 years:
Intra group FE:- Kruskal Wallis test = 13.078, df = 3, P =0.004 (<0.01) (HS)
Mann Whitney U test:
A & M: MW = 1.500, P = 0.071 (>0.05) (Not Sig.)
A & T: MW = 2.000, P = 0.063 (>0.05) (Not Sig.)
A & C: MW = 49.000, P = 0.974 (>0.05) (Not Sig.)
M & T: MW = 6.000, P = 1.000 (>0.05) (Not Sig.)
M & C: MW = 3.000, P = 0.008 (<0.01) (HS)
T & C: MW = 4.000, P = 0.002 (<0.01) (HS)
Inter group (F.E. Vs G.P.): MW = 547.500, P = 0.169 (>0.05) Not Sig.

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; F.E –Mining employees; G.P-General Population

Table 27: Mean decay among the study population according to the sweet intake among the study population

Mean Decay	Mining employees	General Population	Mann-Whitney U test value	P value
No sweet				
Mean	0.64	0.54	1391.500	0.929 (>0.05), Not Significant
S.D	1.81	1.52		
Daily				
Mean	6.07	5.67	973.500	0.003 (<0.01), HS
S.D	1.66	1.30		
2-3 times/week				
Mean	4.37	3.99	7519.500	0.002 (<0.01), HS
S.D	0.87	1.07		
Occasionally				
Mean	1.99	1.55	21262.500	0.000 (<0.001), VHS
S.D	1.24	0.83		

Table 28: Prevalence of dental caries among study population according to socioeconomic status

Dental Caries		Upper class	Upper middle	Middle	Upper lower	Lower	Total
Mining employees							
Yes	No	1	12	51	70	72	206
	%	50.00	26.09	26.15	46.05	68.57	41.20
No	No	1	34	144	82	33	294
	%	50.00	73.91	73.85	53.95	31.43	58.80
Total	No	2	46	195	152	105	500
	%	100.00	100.00	100.00	100.00	100.00	100.00
General Population							
Yes	No	9	35	90	96	50	280
	%	45.00	54.69	56.25	57.83	71.43	58.33
No	No	11	29	70	70	20	200
	%	55.00	45.31	43.75	42.17	28.57	41.67
Total	No	20	64	160	166	70	480
	%	100.00	100.00	100.00	100.00	100.00	100.00
Mining employees: $\chi^2 = 54.195$, df = 4, P = 0.000 (<0.001) (VHS); Cramer's V = 0.329							
General Population: $\chi^2 = 7.055$, df = 4, P = 0.133 (>0.05) (Not Sig.); Cramer's V = 0.121							

Table 29: Distribution of study population according to treatment needs

Treatment needs	Mining employees					M.E – Total	G.P	Total	
	A	M	T	C	P				
Restoration									
Yes	No	10	14	55	35	32	146	210	356
	%	23.26	31.11	39.29	25.00	24.24	29.20	43.75	36.33
No	No	33	31	85	105	100	354	270	624
	%	76.74	68.89	60.71	75.00	75.76	70.80	56.25	63.67
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Extraction									
Yes	No	2	3	22	15	18	60	70	130
	%	4.65	6.67	15.71	10.71	13.64	12.00	14.58	13.27
No	No	41	42	118	125	114	440	410	850
	%	95.35	93.33	84.29	89.29	86.36	88.00	85.42	86.73
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Pulp care									
Yes	No	3	5	25	18	12	63	90	153
	%	6.98	11.11	17.86	12.86	9.09	12.60	18.75	15.61
No	No	40	40	115	122	120	437	390	827
	%	93.02	88.89	82.14	87.14	90.91	87.40	81.25	84.39
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Restoration:									
Intra group - M.E: $\chi^2 = 10.467$, df = 4, P = 0.033 (<0.05) (S) Cramer's V = 0.145									
Inter group (M.E. Vs G.P.): $\chi^2 = 22.414$, df = 1, P = 0.000 (<0.001) (VHS) Cramer's V= 0.151									
Extraction:									
Intra group - M.E: $\chi^2 = 5.794$, df = 4, P = 0.215 (>0.05) (Not Sig.) Cramer's V = 0.108									
Inter group (M.E. Vs G.P.): $\chi^2 = 1.420$, df = 1, P = 0.233 (>0.05) (Not Sig.) Cramer's V= 0.038									
Pulp care:									
Intra group - M.E: $\chi^2 = 6.323$, df = 4, P = 0.176 (>0.05) (Not Sig.) Cramer's V = 0.112									
Inter group (M.E. Vs G.P.): $\chi^2 = 7.031$, df = 1, P = 0.008 (<0.01) (HS) Cramer's V= 0.085									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 30: Distribution of study population according to prosthetic needs and prosthetic status

Prosthetic needs and Prosthetic status		Mining employees					M.E - Total	General Population	Total
		A	M	T	C	P			
Prosthetic needs									
Yes	No	12	15	55	45	43	170	142	312
	%	27.91	33.33	39.29	32.14	32.58	34.00	29.58	31.84
No	No	31	30	85	95	89	330	338	668
	%	72.09	66.67	60.71	67.86	67.42	66.00	70.42	68.16
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Prosthetic status									
Yes	No	2	3	10	8	8	31	35	66
	%	4.65	6.67	7.14	5.71	6.06	6.20	7.29	6.73
No	No	41	42	130	132	124	469	445	914
	%	95.35	93.33	92.86	94.29	93.94	93.80	92.71	93.27
Total	No	43	45	140	140	132	500	480	980
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Prosthetic needs:									
Intra group - M.E: $\chi^2 = 2.798$, df = 4, P = 0.592 (>0.05) (Not Sig.)									
Cramer's V = 0.075									
Inter group (M.E. Vs G.P.): $\chi^2 = 2.201$, df = 1, P = 0.138 (>0.05) (Not Sig.)									
Cramer's V = 0.047									
Prosthetic status:									
Intra group - M.E: $\chi^2 = 0.469$, df = 4, P = 0.976 (>0.05) (Not Sig.)									
Cramer's V = 0.031									
Inter group (M.E. Vs G.P.): $\chi^2 = 0.465$, df = 1, P = 0.495 (>0.05) (Not Sig.)									
Cramer's V = 0.022									

Table 31: Mean treatment needs of study population

Mean Treatment needs		Mining employees					F.E - Total	G.P
		A	M	T	C	P		
Restoration	Mean	2.40	2.29	2.04	1.97	2.34	2.14	2.13
	S.D	1.08	1.33	0.43	0.82	0.79	0.79	0.60
Extraction	Mean	2.00	1.00	1.77	1.87	1.61	1.72	1.64
	S.D	0.00	0.00	0.69	0.74	0.70	0.69	0.76
Pulp Care	Mean	1.00	2.00	1.68	1.83	1.58	1.70	1.59
	S.D	0.00	0.00	0.75	0.92	0.79	0.78	0.76
Restoration: Intra group - F.E: Kruskal Wallis test = 6.047, df = 4, P = 0.196 (>0.05) (Not Sig.) Inter group (F.E. Vs G.P.): Mann Whitney U test = 15013.000, P = 0.706 (>0.05) (Not Sig.)								
Extraction: Intra group - F.E: Kruskal Wallis test = 5.889, df = 4, P = 0.208 (>0.05) (Not Sig.) Inter group (F.E. Vs G.P.): Mann Whitney U test = 1941.000, P = 0.416 (>0.05) (Not Sig.)								
Pulp care: Intra group - F.E: Kruskal Wallis test = 4.899, df = 4, P = 0.298 (>0.05) (Not Sig.) Inter group (F.E. Vs G.P.): Mann Whitney U test = 2604.000, P = 0.342 (>0.05) (Not Sig.)								

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; F.E –Mining employees; G.P-General Population

Table 32: Distribution of study population according to DAI (Dental Aesthetic Index) score

DAI Grades		M.E	G.P	Total
No	No	248	218	466
	%	49.60	45.42	47.55
Grade 1	No	120	128	248
	%	24.00	26.67	25.31
Grade 2	No	62	74	136
	%	12.40	15.42	13.88
Grade 3	No	55	38	93
	%	11.00	7.92	9.49
Grade 4	No	15	22	37
	%	3.00	4.58	3.78
Total	No	500	480	980
	%	100.00	100.00	100.00
Inter group (M.E. Vs G.P.): $\chi^2 = 7.275$, df = 4, P = 0.122 (>0.05) (Not Sig.) Cramer's V= 0.086				

Table 33: Distribution of study population according to grades of tooth surface loss in anterior teeth (Eccle's and Jenkin's criteria)

Tooth surface loss		Mining employees					M.E – Total	G.P	Total
		A	M	T	C	P			
No tooth surface loss	No	37	30	110	85	69	331	425	756
	%	86.05	66.67	78.57	60.71	52.27	66.20	88.54	77.14
Grade 1	No	06	10	22	35	40	113	45	158
	%	13.95	22.22	15.71	25.00	30.30	22.60	9.38	16.12
Grade 2	No	00	05	08	15	15	43	09	52
	%	0.00	11.11	5.71	10.71	11.36	8.60	1.88	5.31
Grade 3	No	00	00	00	05	08	13	01	14
	%	0.00	0.00	0.00	3.57	6.06	2.60	0.21	1.43
Total	No	43	45	140	140	132	500	480	980
	%	100	100	100	100	100	100	100	100
Intra group - M.E: $\chi^2 = 30.391$, df = 12, P = 0.002 (<0.01) (Sig.) Cramer's V = 0.142									
Inter group (M.E. Vs G.P.): $\chi^2 = 73.092$, df = 3, P = 0.000 (<0.001) (Sig.) Cramer's V = 0.273									

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit; M.E –Mining employees; G.P-General Population

Table 34: Comparison of Mean grades of anterior teeth surface loss according to duration of employment among Mining employees

Mean teeth surface loss	Mining employees					Total	Kruskal Wallis Test	Mann Whitney U test
	A	M	T	C	P			
Duration of employment < 5 years								
Mean	0.00	0.14	0.08	0.00	0.13	0.07	KW= 6.171, df=4, P= 0.187 (>0.05) Not Sig	Not applicable
S.D	0.00	0.36	0.35	0.00	0.41	0.31		
Duration of employment 5-10 years								
Mean	0.00	0.17	0.02	0.27	0.40	0.20	KW= 29.079, df=4, P= 0.000 (<0.001) VHS	A=M=T, M=C=P, C,P> A,T
S.D	0.00	0.58	0.13	0.49	0.60	0.46		
Duration of employment 11-15 years								
Mean	0.10	0.38	0.88	1.28	1.36	1.03	KW= 40.705, df=4, P= 0.000 (<0.001) VHS	C=P>T> A=M
S.D	0.32	0.52	0.35	0.54	0.49	0.66		
Duration of employment 15-20 years								
Mean	0.50	0.83	1.21	1.86	2.12	1.40	KW= 16.579, df=4, P= 0.002 (<0.01) VHS	C=P> A=M=T
S.D	0.71	0.41	0.63	0.38	0.99	0.80		
Duration of employment >20 years								
Mean	0.80	1.60	1.50	2.11	2.60	1.81	KW= 9.838, df=4, P= 0.043 (<0.05) Sig	A=M=T, M=T=C=P, C=P >A
S.D	0.45	0.89	0.71	1.05	0.89	1.02		
*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit								

Table 35: Mean grades of anterior teeth surface loss according to duration of employment among Mining employees

Duration of employment	Mean teeth surface loss	Mining employees					Total
		A	M	T	C	P	
< 5 years (a)	Mean	0.00	0.14	0.08	0.00	0.13	0.07
	S.D	0.00	0.36	0.35	0.00	0.41	0.31
5-10 years (b)	Mean	0.00	0.17	0.02	0.27	0.40	0.20
	S.D	0.00	0.58	0.13	0.49	0.60	0.46
11-15 years (c)	Mean	0.10	0.38	0.88	1.28	1.36	1.03
	S.D	0.32	0.52	0.35	0.54	0.49	0.66
16-20 years (d)	Mean	0.50	0.83	1.21	1.86	2.12	1.40
	S.D	0.71	0.41	0.63	0.38	0.99	0.80
>20 years (e)	Mean	0.80	1.60	1.50	2.11	2.60	1.81
	S.D	0.45	0.89	0.71	1.05	0.89	1.02
Kruskal Wallis Test		KW= 24.103, df=4, P= 0.000 (<0.001) VHS	KW= 18.293, df=4, P= 0.001 (<0.01) HS	KW= 100.320, df=4, P= 0.000 (<0.001) VHS	KW= 95.216, df=4, P= 0.000 (<0.001) VHS	KW= 75.349, df=4, P= 0.000 (<0.001) VHS	KW= 259.049, df=4, P= 0.000 (<0.001) VHS
Mann Whitney U test[#]		a=b=c c=d d=e d,e > a,b e > c	a=b=c c=d d=e d,e > a,b e > c	c = d = e > a = b	d = e > c > b > a	d = e > c > b > a	d = e > c > b > a

[#] a = < 5 years, b = 5-10 years, c = 11-15 years, d = 16-20 years, e = > 20 years

*A - Administrative unit; M-Maintenance unit; T-Transportation unit; C-Cutting unit; P-Polishing unit

Table 36: Comparison of PM values in different areas of Udaipur city

Area	PM Value ($\mu\text{g}/\text{m}^3$) (Mean \pm SD)
Udaipur Ambamata (1)	119.00 \pm 42
Udaipur Town Hall (2)	134.00 \pm 48
Udaipur Regional Office, MIA (3)	212.00 \pm 95
Mining area (4)	254.00 \pm 64
Kruskal Wallis Test	KW= 36.70, df=3, P= 0.000 (<0.001) VHS
Mann Whitney U test	4>3>2>1

*1= Udaipur Ambamata, 2 = Udaipur Town Hall,

3 = Udaipur Regional Office, MIA, 4 = Mining area