

# PERSONAL HYGIENE PRACTICES AMONG ADOLESCENTS AT ASSIUT AND SOUTH VALLEY UNIVERSITIES

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#### **ABSTRACT:**

The study was conducted at Assiut and South Valley Universities in faculties of education, science, arts, veterinary, agriculture and social services. The sample included 5% of the students enrolled in the first and second year of the chosen universities during the academic year 1998-1999 agreed to participate in this study. A designed questionnaire was used to collect data for this study. The results showed that highly statistical significant differences between Assiut and South Valley students in relation to items of bath, hair wash in summer and winter, also underwear change in winter with a better practices among students of South Valley university p < 0.001 and statistical significant differences between Assiut and South Valley groups in relation to items of teeth brushing and removal of unwanted hair p <0.05. A highly statistical differences were found among males and females of Assiut students related to items of teeth brushing, hair wash and bath in summer and winter p<0.001. Also the result showed that statistical significant differences between males and females students in South Valley university related to items of nail cutting and change of underwear cloths in winter. The present study recommended that increase of the public awareness about the importance of personal hygiene particularly for adolescents and the important of availability of nurses in the university hostels and student's health service centers to provide health education and guidance for students.

#### **INTRODUCTION:**

Personal hygiene is the activity of selfcare, including bathing, dressing, feeding and toileting. These activities are considered basic health rules. When persons can not perform these activities; their health and well being can be jeopardized [1].

Personal hygiene practices are often learned from the family and community in whom one is raised. These practices are learned in the early years of one's life and are modeled after family members; friends and other community members such as care takers, teachers and parents [2].

Pascucci [3] pointed that proper nutrition and care of skin, teeth, hair and nails promote good health by helping to protect the body from infection and disease and by allowing the person to feel good and have a positive self-image.

During the adolescence stage, self care activities become more important as the body begins to mature and physiologic changes start to occur. Hormonal changes in adolesecents result in growth of pubic and axillary hair in both sexes. Boys develop facial hair and may begin shaving. Sebaceous glands become more active and often produce excess oil on the skin which lead to skin problems as acne and inflammation which are psychologically devastating to the adolescents self-image [2]. Sweat glands also become fully developed and functional and adolescents may need to use deodorant or antiperspirant. This clarifies the importance of daily bathing and shampooing to counteract body odor [4].

Personal hygiene practice is affected by many factors which are the developmental level, cultural background, socio-economic status, personal habits and health status [2]. In 1996, Craven and Hirnle [5] also pointed that there are external and internal resources which may influence personal hygiene practices also. The external condition: include housing resources availability of water and the ability to purchase self care products. The internal resources include the inner strength (ability) to handle physical and emotional work, sensory input, cognitive abilities, desire and communication.

Nurses play an important role in teaching adolescents the hygienic techniques that would be of benefit, and also in assessing the persons' performances related to personal hygiene. They also realize that the standard which is built into health care system is not necessarily universal in acceptance and they are able to judge and respect the individual differences within the limits of optimum health [6].

The aim of this study was to study personal hygiene practices among adolescents at Assiut and South Valley universities.

#### **SUBJECTS AND METHODS:**

Setting: This study was conducted at Assiut and South Valley Universities in faculties of education, science, arts, veterinary, agriculture and social services.

Sample: The sample included 5% of the total students enrolled in the first and the second year of the chosen faculties during the academic year 1998-1999, their number was 543 students (males and females), 246 of them from Assiut University and 297 Students from south valley university.

Tool: Self-administered questionnaire was designed specifically to collect data for this study, the sheet included personal information as, name, age, sex, name of the faculty, academic year, birth place and accommodation.

Information related to personal hygiene practices as teeth brushing, nail care, bathing and changes clothes was also requested.

#### **METHODS OF DATA COLLECTION:**

- -Official letters from the investigators were prepared and delivered to the vice-deans of education and student's affairs in each faculty for approval to collect data related to this study.
- -Students' permission to participate in the study was taken.
- -Pilot study was carried out on 10% students for clarity of the sheet and the necessary modifications in the sheet were done. This participant was excluded from the study.

Data was collected during the period from November 1998 to January 1999. A previous appointment was done for each faculty and each class separately, the questionnaire sheet was administered to the students during 20 minutes of a regularly scheduled class period. The investigators gave a brief description of the study to students before the questionnaire sheet was administered. The allowed time for completing the questions had been determined. The investigators asked students were to answer the questions individually, and students reassured that the information obtained will be confidential and used only for the purpose of the study.

Analysis of the data: The obtained data were analyzed and tabulated and descriptive statistics were calculated using a computer and Epi-Info 6 program [7]. Chi-square test was used too.

#### **RESULTS:**

Table (1) shows some demographic characteristics of the respondent students of both Assiut and South Valley universities. The mean age of the studied Assiut university students was 19.5±0.9 and 18.0±0.5 years for South Valley University students. Males constitute 41.9% of Assiut and 39.4% of South Valley students with insignificant difference between both groups.

Regarding to the birth place, it was found that 38.6% of Assiut and 59.3% of South Valley groups were born in rural areas (p<0.001) and 42.7% of Assiut group were living in the university hostels compared to 37.7% of South Valley group. 38.2% of Assiut group living were with family compared to 30% of South Valley group. Students living in shared flats were 13.8% of Assiut and 30.6% of South Valley groups (p<0.001).

Table (2) shows personal hygiene practices among Assiut and South Valley students groups. The main items were teeth nail cutting, brushing, removal unwanted hair. bath and change of underwear during winter and summer. Highly statistical significant differences were found between Assiut and South Valley groups in relation to items of bath, hair wash in summer and winter and underwear change in winter with a better practices among students of South Valley university p<0.001and statistically significant differences were found between Assiut and South Valley groups in relation to items of teeth brushing and removal of unwanted hair p<0.05.

Table (3) shows personal hygiene practices among males and females students at Assiut and South Valley universities. Highly statistical significant differences were found between personal hygiene practices among males and females of Assiut students related to items of teeth brushing, hair wash and bath in winter and summer p<0.001.

As regards South Valley students, statistical significant differences were found between personal hygiene practices among males and female related to items of nail cutting and change of underwear clothes in winter. The table shows also, male students had a better practices related to the items of removal of unwanted hair, hair washing in winter and summer and bathing in winter and summer p<0.001 for each while female students had a better hygiene practices related to the items of

teeth brushing and underwear change p<0.001 and p<0.05 respectively.

Table (4) shows personal hygiene practices by accommodation for the studied universities students. As regards Assiut group, statistical significant differences were found with better personal hygiene practices among students in the university hostels related to teeth brushing p<0.001, nail cutting p<0.001. Students living with their families had better personal hygiene practices related to hair and bathing in winter and summer p<0.001 and p<0.01 respectively.

As regards to South Valley group, the table shows no statistical significant differences related to all items except teeth brushing practice p<0.05 which was better among students living in university hostels and winter bath with better practice among students living in shared flats p<0.01.

Table (1): Some demographic characteristics of respondents' students of both Assiut and South Valley Universities

		vaney Or	niversities				
	Assiut U	niversity	South V	V. Univ.	Total (n=543)		
Characteristics	(n=2	246)	(n=	297)			
	No.	%	No.	%	No.	%	
1- Age (years):							
- less than 18 years	134	54.4	280	94.3	414	76.2	
- 18- 20 years	112	45.6	17	5.7	129	23.8	
Mean <u>+</u> SD	19.5 <u>+</u> 0.9		$18.0 \pm 0.5$				
2- Sex:							
- Male	103	41.9	117	39.4	220	40.5	
- Female	143	58.1	180	60.6	323	59.5	
Significance	$X^2 = 0.247$		p=0.62 NS				
3- Birth place:							
- Rural	95	38.6	176	59.3	271	49.9	
- Urban	151	61.4	121	40.7	272	50.1	
Significance	$X^2 = 22.1$		p<0.001*				
4- Accommodation:							
- USH #	105	42.7	112	37.7	217	40.0	
- With family	94	38.2	89	30.0	183	33.7	
- Rented (Shared) flat	34	13.8	91	30.6	125	23.0	
- With relatives	13	5.3	5	1.7	18	3.3	
Significance	$X^2 = 25.3$		p<0.001 *				

**#USH = University Student Hostels** 

\*Very highly significant

NS= not significant

Table (2): Personal hygiene practices among students of Assiut & South Valley Universities

Table (2): Personal hygiene pr							
Personal hygiene Practice		iv. (n=246)	S. Valley. Uni		Total (n=543)		
	No.	%	No.	%	No.	%	
1- Teeth brushing:							
a- always (every day)	136	55.3	181	60.9	317	58.4	
b- sometimes	88	35.8	76	25.6	164	30.2	
c- none	22	8.9	40	13.5	62	11.4	
Significance	$X^2 = 7.8$		p<0.05 *				
2-Nail cutting:							
a- always keep it cut	200	81.3	266	89.6	466	85.8	
b- sometimes (sometimes long)	37	15.0	30	10.1	67	12.3	
c- none	9	3.7	1	0.3	10	1.8	
Significance	$X^2 = 11.8$		p<0.01 **				
3- Removal of unwanted hair:							
a- always remove it	150	61.0	206	69.4	356	65.6	
b- sometimes	76	30.9	80	26.9	156	28.7	
c- none	20	8.1	11	3.7	31	5.7	
Significance	$X^2 = 6.8$	•	p< 0.05 *				
4- Hair wash in winter:			*				
a- more than once/day	32	13.0	70	23.6	102	18.8	
b- once/day	77	31.3	94	31.6	171	31.5	
c- every other day	51	20.7	112	37.7	163	30.0	
d- other unfixed times	86	35.0	21	7.1	103	19.7	
Significance	$X^2 = 74.02$	33.0	p<0.001 ***	7.1	107	17.7	
	74.02		p -0.001				
5- Hair wash in summer:	0.0	266		40.7		12.6	
a- more than once/day	90	36.6	147	49.5	237	43.6	
b- once/day	48	19.5	73	24.6	121	22.3	
c- every other day	55	22.4	74	24.9	129	23.8	
d- other unfixed times	$\frac{53}{X^2 = 62.1}$	21.5	3	1.0	56	10.3	
Significance	$X^{-} = 62.1$		p<0.001 ***				
6- Bathing in Winter:		,			1		
a- more than once/day	2	0.8	10	3.4	12	2.2	
b- once/day	36	14.6	86	29.0	122	22.5	
c- every other day	130	52.9	185	62.3	315	58.0	
d- other unfixed times	78	31.7	16 <0.001 ***	5.4	94	17.3	
Significance	$X^2 = 72.2$	b.					
7- Bathing in summer							
a- more than once/day	61	24.8	144	48.5	205	37.7	
b- once/day	116	47.2	125	42.1	241	44.4	
c- every other day	56	22.8	27	9.1	83	15.3	
d- other unfixed times	13	5.3	1	0.3	14	2.6	
Significance	$X^2 = 50.01$		p<0.001 ***				
8- Underwear change in summer:							
a- more than once/day	31	12.6	48	16.2	79	14.5	
b- once/day	134	54.5	180	60.6	314	57.8	
c- every other day	74	30.1	64	21.5	138	25.4	
d- other unfixed times	7	2.8	5	1.7	12	2.2	
Significance	$X^2 = 6.7$		p = 0.08 NS				
9- Underwear change in winter:							
a- more than once/day	6	2.7	8	2.7	14	2.6	
b- once/day	55	22.4	102	34.3	157	28.9	
c- every other day	132	53.7	178	59.9	310	57.1	
d- other unfixed times	53	21.5	9	3.0	62	11.4	
Significance	$X^2 = 110.2$		p<0.001 ***				
* Significant ** Highly signifi		** Vow bial	hly significant	NIC	ot signi	C 4	

<sup>\*</sup> Significant

<sup>\*\*</sup> Highly significant

<sup>\*\*\*</sup> Very highly significant

NS= not significant

Table (3): Personal Hygiene practices among male and female students at Assiut and South Valley universities.

Practice Assiut University students South Valley University Students											
Fractice	Males % Females %				South Valley University Students  Males % Females %						
1-Teeth brushing :	Maies	70	remaies	70	Maies	70	remaies	70			
Yes, every day	32	31.1	104	72.7	52	44.4	129	71.7			
Sometimes	54	52.4	34	23.8	35	29.9	41	22.8			
None	17	16.5	5	3.5	30	25.6	10	5.6			
Significance	$X^2 = 43.9$		0.001 ***	0.0	$X^2 = 31.3$		0.001 ***	0.0			
	1	г	*****		1 22 2 2	r					
2-Nail cutting:	92	89.3	100	75.5	110	94.0	156	86.7			
Yes, every day Sometimes	8	89.3 7.8	108 29	20.3	7	6.0	23	12.8			
None	3	2.9	6	4.2	0	0.0	23 1	0.6			
Significance	$X^2 = 7.9$		< 0.05 *	4.2	$X^2 = 4.3$		0.11 NS	0.0			
	1	Р	10.05		71 1.0	- Р (	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
3- Removal of unwanted		(7.0	01	<b>5</b> ( (	00	02.0	100	(0.0			
Yes, regularly Sometimes	69 28	67.0 27.2	81 48	56.6 33.6	98 14	83.8 12.0	108	60.0 36.7			
None	6	5.8	48 14	9.8	5		66	3.3			
Significance	$X^2 = 3.0$		0.22 NS	7.0	$X^2 = 22.0$	4.2 6 p<0.001***		3.3			
_	A - 3.0		0.22 113		A - 22.0	p~c	.001				
4-Winter hair wash:											
>once/day	23	22.3	9	6.3	56	47.9	14	7.8			
Once/day	60	28.3	17	11.9	52	44.4	42	23.3			
Once/other day Other times	13 7	12.6 6.8	38 79	26.6	6 3	5.1 2.6	106 18	58.9 10.0			
				55.2				10.0			
Significance $X^2 = 98.8$ p<0.001 *** $X^2 = 118.2$ p<0.001***											
5-Summer hair wash:				1				,			
>once/day	72	69.9	18	12.6	102	87.2	45	25.0			
Once/day	22	21.4	26	18.2	12	10.3	61	33.9			
Once/other day	5	4.9	50	35.0	2	1.7	72	40.0			
Other times	4	3.9	49	34.3	1	0.9	2	1.1			
Significance	$X^2 = 104.0$ p<0.001 *** $X^2 = 113.3$ p<0.001 ***										
6-Bathing in Winter:											
>once/day	37	35.9	24	16.8	68	58.1	76	42.2			
Once/day	46	44.7	70	49.0	40	34.2	85	47.2			
Once/other day	18	17.5	38	26.6	8	6.8	19	10.6			
Other times	2 Y <sup>2</sup> 22.0	1.9 11		7.7	$\begin{array}{c c} 1 \\ X^2 = 18.1 \end{array}$	0.9	0 001444	0.0			
Significance	$X^2 = 33.8$ p< 0.001 ***				X <sup>2</sup> = 18.1 p<0.001***						
7-Bathing in Summer :											
>once/day	2	1.9	0	0.0	7	6.0	3	1.7			
Once/day	23	22.3	13	9.1	47	40.2	39	21.7			
Once/other day	65	63.1	65	45.5	59	50.4	126	70.0			
Other times Significance	$13$ $X^2 = 15.0$	12.6	65	45.5	$X^2 = 9.18$	3.4	12 0.01**	6.7			
		p<	0.001 """		A - 9.18	p<(					
8-Summer underwear o				1	, ,			1			
>once/day	14	13.6	17	11.9	17	14.5	31	17.2			
Once/day	59	57.3	75 45	52.4	62	53.0	118	65.6			
Once/other day	29	28.2	45	31.5	34	29.1	30	16.7			
Other times	$\frac{1}{v^2-20}$	1.0	6 0.42 NG	4.2	$\frac{4}{v^2-10.7}$	3.4	1	0.6			
Significance $X^2 = 2.8$ p=0.42 NS $X^2 = 10.7$ p<0.05*											
9-Winter underwear ch					, ,						
>once/day	3	2.9	3	2.1	4	3.4	4	2.2			
Once/day	26	25.2	29	20.3	39	33.3	63	35.0			
Once/other day	62	60.2	70	49.0	69	59.0	109	60.6			
Other times	12	11.7	41	28.7	$\begin{array}{c c} 5 \\ X^2 = 1.45 \end{array}$	4.3	4	2.2			
Significance	$X^2 = 10.07$	<b>**</b> -	<0.05 *		V = 1 15	~-/	).69 NS				

\* Significant

\*\* Highly significant

\*\*\* Very highly significant NS= not significant

Table (4): Personal hygiene practices by accommodation of the students at Assiut and South Valley universities.

	1				Q: 1			versiti	_				•		, -	
- ·	Assiut University Students (n=2													_		
		versity		/ith		dents	Ot	hers		ersity		ith		dents	Ot	hers
		stels		mily		lats	,	40)	Hostels		Family		Flats		,	-
	_	=105)		=94)		=34)		=13)		112)		<del>-89)</del>	_ \	=91)	_	= 5)
-	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1-Teeth brushin	ng:															
Yes every day	80	76.2	31	33.0	18	52.9	7	53.9	74	66.1	60	67.4	45	49.5	2	40
Sometimes	23	21.9	48	51.1	13	38.2	4	30.8	20	17.9	23	25.8	31	34.0	2	40
None	2	1.9	15	16.0	3	8.8	2	15.4	18	16.0	6	6.7	15	16.5	1	20
Significance X <sup>2</sup> = 40.3 df=6 p<0.001***										13.3	df=	6	p<0.05 <sup>5</sup>			
2-Nail cutting:																
Yes regularly	88	83.8	80	85.1	27	79.4	5	38.5	105	93.8	74	83.1	82	90.1	5	100
Sometimes	17	16.2	11	11.7	5	14.7	4	30.8	7	6.3	15	16.9	8	8.8	0	0
None	0	0	3	3.2	2	5.9	4	30.8	0	0	0	0	1	1.1	0	0
Significance	$X^2 = 1$	36.6	df=	6 r	o<0.001	***			$X^2 =$	9.3		df=6	p=	0.159 NS	8	
3-Unwanted ha	ir rem	oval :														
Yes regularly	66	62.9	61	64.9	17	50	6	46.1	81	72.3	56	62.9	66	72.5	3	60
Sometimes	27	25.7	26	27.7	16	47.1	7	53.9	28	25	28	31.5	22	24.2	2	40
None	12 Y <sup>2</sup>	11.4	7	7.5	1	2.9	0	0	$X^2 =$	2.7	5	5.6	3	3.3	0	0
Significance	$X^2 =$	11.4	df=	u I	)=0.077	11/2			Λ-=	3./		df=6	p=	0.72 NS		
4-Winter hair v	vash:															
>once/day	7	6.7	21	22.3	4	11.8	0	0	31	27.7	13	14.9	26	28.6	0	0
Once/day	17	16.2	52	55.3	8	23.5	0	0	30	26.8	31	34.5	32	35.2	2	40
Once/other day	36	34.3	11	11.7	4	11.8	0	0	47	42	39	43.7	25	27.5	2	40
Other times	45	42.9	10	10.6	18	53	13	100	4	3.6	6	6.9	8	8.8	1	20
Significance	$X^2 =$	94.6	df=9	9 1	>.0.00	***			$X^2 =$	15.0	df=9	9 1	=0.09 l	NS		
5-Summer hair	wash	:														
>once/day	15	14.3	65	69.2	10	29.4	0	0	57	50.9	34	38.2	54	59.3	1	20
Once/day	27	25.7	16	17	5	14.7	0	0	30	26.8	26	29.2	14	15.4	2	40
Once/other day	38	36.2	8	8.5	7	20.6	2	15.4	23	20.5	28	31.5	23	25.3	2	40
Other times	25	23.8	5	5.3	12	35.3	11	84.6	2	1.8	1	1.1	0	0	0	0
Significance	$\mathbf{X}^2 =$	108.2	df=	9 r	><0.001	***			$X^2 =$	13.2	df=	<del>9</del> 1	=0.15 l	NS		
6-bathing in Su	mmer	•														
>once/day	17	16.2	29	30.8	14	41.2	1	7.7	59	52.7	38	42.7	46	50.6	1	20
Once/day	51	48.6	47	50	9	26.5	9	69.2	42	37.5	39	43.8	41	45	3	60
Once/other day	28	26.7	15	16	10	29.4	3	23.1	10	8.9	12	13.5	4	4.1	1	20
Other times	9	8.6	3	3.2	1	2.9	0	0	1	0.9	0	0	0	0	0	0
Significance	$X^2 = $	40.3	df=9	9 1	<0.01*	*			$X^2 =$	20.0	df=9	9 1	<0.01*	*		
7-bathing in Wi	inter ·															
>once/day	0	0	2	2.1	0	0	0	0	4	3.6	2	2.3	4	4.4	0	0
Once/day	10	9.5	21	22.3	5	14.7	0	0	31	27.7	20	22.5	34	37.4	1	20
Once/other day	56	53.6	59	62.8	12	35.3	3	23.1	74	66.1	61	68.5	48	52.8	2	40
Other times	39	37.1	12	12.8	17	50	10	76.9	3	2.7	6	6.7	5	5.5	2	40
Significance	$X^2 = 1$	21.6	df=9	9 <u>r</u>	=0.01*	*			$X^2 =$	9.5		df=9	p:	=0.39 NS	1	
8-Summer und	erwea	r chang	e:													
>once/day	13	12.4	12	12.8	4	11.8	2	15.4	18	16.1	15	16.9	14	15.4	1	20
Once/day	56	53.3	54	57.3	14	41.2	10	76.9	66	58.9	57	64	56	61.5	1	20
Once/other day	33	31.4	25	26.6	15	44.1	1	7.7	27	24.1	15	16.9	19	20.9	3	60
Other times	3	2.8	3	3.2	1	2.9	0	0	1	0.9	2	2.3	2	2.2	0	0
		7.8		df=9	p=	=.0.55 NS			$X^2 =$	7.2		df=9	p=	0.62 NS		
Significance	$X^2 =$															
9-Winter under																
9-Winter under >once/day	wear	change 1.9	4	4.3	0	0	0	0	3	2.7	4	4.5	1	1.1	0	0
9-Winter under >once/day Once/day	wear	change 1.9 20	4 21	22.3	8	23.5	4	30.8	39	34.8	26	29.2	34	37.4	3	60
9-Winter under >once/day Once/day Once/other day	wear (2 21 59	change 1.9 20 56.2	4 21 54	22.3 57.4	8 14	23.5 41.2	4 7	30.8 53.8	39 67	34.8 59.8	26 56	29.2 62.9	34 54	37.4 59.3	3 1	60 20
9-Winter under >once/day Once/day	wear	change 1.9 20 56.2 21.9	4 21	22.3	8 14 12	23.5	4	30.8	39	34.8 59.8 2.7	26	29.2	34 54 2	37.4	3	60

<sup>\*</sup> Significant \*\* Highly significant

<sup>\*\*\*</sup> Very highly significant

#### **DISCUSSION:**

The practice of personal hygiene measure is a health promoting behaviour. The word hygiene also refers to the science of health and its maintenance, the prevention of disease and sanitary practices [2].

Habits formed around the frequency of bathing, brushing teeth and changing clothes or eating patterns are usually learned early in life from family members, friends and peers within the community. Such preferences may vary widely from person to person and culture to culture [5].

#### **Teeth brushing:**

As regards teeth brushing, table 3 shows that females in each group do more regular (every day) teeth brushing than (p<0.001) which males agrees with Freeman [8]. It was also evident that Assiut students living in the hostels and shared flats do more frequent teeth brushing (p<0.001). Than those living with family probably to different due social environment and the effect of peer group in the university hostels.

In the South Valley group students living with family do more teeth brushing than those in the university hostels and more frequent than the students living in shared flats (p<0.05) possibly due to family guidance.

In a study done in Israel on 132 high school students, 72.7 % claimed to brush their teeth daily. More than half of the pupils attributed esthetical importance to the teeth appearance. The authors emphasised that resources should be

invested in schools for oral hygiene and caries prevention education in the hope of improving oral health [9].

In this study, Assiut group do teeth brushing more (91.1%) than South Valley group (86.5%) (p<0.05) and it is more than the percentage mentioned [9]. It may be attributed to cultural backgrounds between the two different communities since Assiut group were more borne in urban areas than South Valley group.

Proper care of teeth and gums helps to prevent gum deterioration and tooth loss. Plaque and food particles can be removed by daily brushing, flossing and rinsing. When plaque remains on the teeth, it hardens into tartar, which cannot be removed by simple brushing. Healthy gums are important because they provide support for the teeth [5].

In Sierra Leone & Normark [10] evaluated oral health promoting activities for children and adolescents, it was found that 95% brushed their teeth every day.

#### **Nail Cutting:**

Esemio-Jensson [11] pointed out that nail care is an important aspect of personal hygiene because clean, short nails are as likely as to transfer organisms as long unkept ones. Ideally, the fingernails and toenails are kept clean, well rounded and short. Long nails may hurt oneself or others.

It was evident from the results that the South Valley group cut their nails more than Assiut group (p<0.01) which probably can be explained by the birth place variation since they are mostly born in rural areas. Males of Assiut group always

cut their nails more than females (p<0.05). In SV group there was no sex difference probably because they are born mostly in rural areas and they cut their nails as males, which may be explained by the social habit differences, birth place which is more urban in Assiut group

Students living in Assiut University hostels do nail cutting more frequently than those living in any other type of accommodation (p<0.001). The relationship between type of accommodation and nail cutting in South Valley group was insignificant.

#### Removal of Unwanted hair:

Removing unwanted hair depends on cultural or personal preferences; some females wear makeup and many shave underarms and legs as an important part of grooming. For males, shaving can be extremely important to their physical appearance and self-image. Some of them feel as though they are not properly groomed without shaving every day, while others do not need to shave every day. Others experience skin irritation if they do not shave daily.

The present study revealed that, the South Valley group was better than Assiut group in regular removing of unwanted hair (p<0.05). Male students of South Valley group regularly remove the unwanted hair more than females (p<0.001) and there was no sex difference among Assiut group which may be due to the effect of peer group and males usually go out freely without restriction as among females. There was also no significant relationship between the practice of removal of

unwanted hair and the type of accommodation in each group

#### Winter hair Wash:

Generally, hair wash occurred at longer intervals in winter than in summer. In winter, the South Valley group does hair washing more frequently than Assiut group p<0.001). Male students of Assiut group do hair wash more frequent and at more regular intervals than females, (p<0.001) and more than females of South Valley group (p<0.001). This sex difference is probably due to sex differences in hair characteristics such as length and style. In Assiut group most of the students do hair washing at irregular times except among 55.3% of those living with family wash their hair once/day (p<0.001). In the South Valley group there was no significant relationship between winter hair wash and accommodation type and it is more frequent than that among Assiut group)

#### Summer hair wash:

Hair wash in summer was more frequent in South Valley group than in Assiut group (p<0.001). Male students of Assiut group wash their hair more frequent than females (p<0.001) and more frequent than females of South Valley group (p<0.001) which may be due to the physical characteristics of female hair. It was evident also from Table 4, that there was an increased frequency of hair washing in summer than in winter. In Assiut group, students living with family wash their hair more frequent (More than once/day in 69.2%) than those living in university hostels (36.2% once/other day). They are

better than students living in shared flats and other types of accommodation (p <0.001) as in South Valley group there was no significant relationship between summer hair wash and type of accommodation.

## **Bathing in winter:**

Generally as evident from the results, winter baths were taken at a longer intervals than in summer but still South Valley group bathe more frequent than in Assiut group (p<0.001) which may be due to the effect of climate. Males of Assiut group bathe more frequent than females (p<0.001) and more than females of South Valley group (p<0.001) and less than males of South Valley group too which may be explained by climate variation. Assiut students living with family bath at regular interval more than students in other types of accommodation, (p<0.01) which may be due to family guidance. In South Valley group those living in university hostels and shared flats, bath (once /day) more than students living with family (p<0.01) which could be explained by the presence of enough water in hostels than within the private houses.

The environment in which people learn and practices is another factor. For example, in a household without running water, family members may bath only once every 2 or 3 days and the children may bath together. Television and advertisements may also have a large impact on the products people consume and the grooming practices [12].

Craven and Hirnle [5] stressed that during adolescence stage, sweat glands become fully developed and functional and adolescents may need to begin using deodorant or antiperspirant. Daily bathing and shampooing becomes important to counteract body odor along with those physiologic changes. **Adolescents** also psychological undergo extreme and emotional changes and begin to develop their own activity and define themselves. Girls and boys become interested in looking attractive to the opposite sex. The behavior of peers heavily influences dressing and grooming practices, because adolescents want the other to accept them. Magazine and media influence advertisements adolescents who may copy hairstyles and fashions

### **Bathing in Summer:**

Bathing is one of the good hygiene practices and has the following benefits 1-Cleanses body secretions, microorganisms, debris and perspiration from skin. 2-Stimulates circulation. 3-Improves joint mobility. 4-Provides relaxation 5-Provides opportunity to evaluate skin status and observe for signs of physical problems or deterioration [5].

In this study, in summer, the South Valley group baths more frequently than Assiut group (p<0.001). It is evident also that Assiut students living in shared flats and in other types of accommodation bath more frequent (p<0.01). In the South Valley, the relationship was insignificant which can be explained by the effect of climate and peer group. Males bath more frequent than females of Assiut group (p<0.001) and also more than females of South Valley group (p<0.01) which may be due to the physical characteristics of female hair.

### **Underwear Change:**

In winter, the south valley group change the underwear more frequent (once/day) than Assiut group (p<0.001) which may be due to climate temperature differences. In summer there was no significant difference between both student groups. There was no sex difference among Assiut group as regards change of underwear in summer. On the contrary female students of the South Valley change the underwear more frequent than the males (p<0.05). There was no significant relationship between accommodation type and frequency of summer or winter underwear change in each group which may be explained as the underwear change is a private matter and not apparent. Males of Assiut group change the underwear more frequent than females in winter. There was no sex difference among South Valley group as regards change of underwear in winter.

Leahy and Kizilay in 1998 mentioned also the factors influencing personal hygiene practices as follow:

- 1-Developmental level; children and adolescence stages
- 2-Cultural background. i.e. Norms related to hygiene practices differ from culture to culture.
- 3-Socio-economic status: Financial status often affects a person's ability to purchase hygiene products. Living arrangements may also affect hygienic practices
- 4-Personal Habits; some people have a specific preference about their hygienic practices i.e. preferring a shower to a tub bath.
- 5-Health status of the individual.

#### **CONCLUSIONS:**

Personal hygiene practices are important for prevention of diseases as well as for the appearance of the person particularly among adolescents. Variations in personal hygiene practice can be attributed to the socio-cultural backgrounds and personal habits.

#### **Recommendations:**

- 1-Personal hygiene practice education should be integrated in the student's curriculum.
- 2-Increase of the public awareness about the importance of personal hygiene particularly for adolescents through mass media.
- 3-Availability of nurses in the university hostels and student's health service centers to provide health education and guidance for students

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## ممارسة النظافة الشخصية للمراهقين في جامعتي أسيوط وجنوب الوادي

# حسنى شعبان أحمد ، هدى دياب فهمى إبراهيم ، عواطف السيد أحمد "

- ١- قسم الصحة العامة والطب الوقائى كلية الطب جامعة أسيوط
- ٢- قسم تمريض صحة المجتمع المعهد العالى للتمريض جامعة أسيوط
  - ٣- قسم تمريض الأطفال المعهد العالى للتمريض جامعة أسيوط

أجريت هذه الدراسة في كليات التربية والعلوم والآداب والطب البيطري والزراعة والخدمة الاجتماعية في جامعتي أسيوط وجنوب الوادي ، واحتوت العينة على ٥% من المجموع الكلي لطلاب السنة الأولى والثانية في الكليات السابقة في الجامعتين أثناء العام الدراسي ١٩٩٨ - ١٩٩٩ ، وقد صممت استمارة استبيان لجمع البيانات من هؤلاء الطلاب ، وقد أوضحت النتائج أنه توجد اختلافات إحصائية جوهرية بين طلاب الجامعتين ، وكان طلاب جامعة جنوب الوادي أفضل في كل من الاستحمام والعناية بالشعر في الشتاء والصيف وتغيير الملابس الداخلية في الشتاء (القيمة الجوهرية = بالشعر في كل من نظافة الأسنان والتخلص من الشعر الزائد (القيمة الجوهرية = ٥٠٠٠)، كما وجد اختلافات جوهرية بين طلاب الجامعتين في كل من نظافة الأسنان

وأوضحت أيضاً أنه توجد اختلافات إحصائية جوهرية بين الإناث والذكور في جامعة أسيوط بالنسبة لنظافة الأسنان والعناية بالشعر والاستحمام في الشتاء والصيف (القيمة الجوهرية = ١٠٠٠،) ، وكذلك في جامعة جنوب الوادي بالنسبة لقص الأظافر وتغيير الملايس الداخلية .

وقد أوصت هذه الدراسة بزيادة وعى المجتمع بأهمية النظافة الشخصية الخاصة للمراهقين ، كما أوصت بأهمية وجود ممرضات فى المدن الجامعية للطلاب ومراكز الخدمات الصحية للطلاب لكى تقمن بعملية الإرشاد والتثقيف الصحي للطلاب .