

Psycho-Social Determinants of Lack of Hand Washing Before Meals in Lahore Urban Community

Asad Ahmed Chohan

ABSTRACT

Hand washing before meal is a fundamental part of standard precaution procedures and disease control. Lack of hand washing is a major cause of spread of infections in human beings. **Methodology:** The study was conducted on people who were not accustomed to hand washing before meals and fulfilled the criteria laid down for it. The control group comprised of healthy adults who washed hands as a practice before meals. The study population was divided into two groups. Group 1 comprised of people who did not wash their hands before meals. Total number of subjects were 50(n=50). Group 2 also comprised of 50 individuals (n=50) who were healthy controls. **Results:** Overall 43% were males and 57% were females. Lack of hand washing was found more in females (78%), in the age group below 15 years (100%), those who were married (86%), in engineers and teachers (both 100%), and mostly in high school graduates and college graduates (both 100%). **Conclusion:** Lack of hand washing was found more in females, in the age group below 15years and in matric and graduates students. The determinants of lack of hand washing identified include shortage of time, unavailability of water and fast food trend while laziness, lack of awareness, shyness, travelling and lack of religious education were not found to be significantly associated.

Key words: Psychosocial, determinants, hand washing, time shortage, fast food.

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Article Citation: Chohan AA. Psycho-Social Determinants of Lack of Hand Washing Before Meals in Lahore Urban Community. APMC 2016;10(1):31-35.

INTRODUCTION

Many communicable diseases can be prevented by a very simple and easy practice: hand washing before taking meals. It is the most important and cost-effective means to decrease the burden of infectious diseases in developing countries but unfortunately in many South Asian countries like Pakistan, it is not commonly practiced by the general population. Many internal and external factors are attributed to non-compliance of washing hands before meals, most important being the habitual factor.¹ In developing countries, financial constraints e.g high costs of soap relative to low income are one of the major contributing factors.² According to a research study, time shortage is a frequent cause of non-compliance. The same study also showed that low self-efficiency is another important factor for non-compliance.³ Other typical reasons include lack of motivation for washing hands, ignorance, forgetfulness and carelessness.¹ Some people don't wash their hands just because of laziness and some due to certain psychological disorders e.g

hydrophobia(fear of water).¹ In another research study it was found that people wash their hands before meals more frequently when they know that they're being observed.⁴

There was little data available on the existing situation of non-compliance of hand washing before meals. So, there was a dire need to conduct a research study to find out the extent of this problem and various contributing psycho-social factors so that measures may be adapted to promote the practice of hand washing before taking meals in the community.

Objectives: To determine the association between various psycho-social factors and lack of hand washing before meals.

METHODOLOGY

Design and setting

A case-controlled study was conducted to identify various psychosocial factors associated with lack of hand washing before meals in urban Lahore from

Aug 2012 to Sep 2012. The study was conducted on people who were not accustomed to handwashing before meals and fulfilled the criteria laid down for it. The control group comprised of healthy adults who washed hands as a practice before meals. The study population was divided into two groups. Group 1 comprised of people who did not wash their hands before meals. Total number of subjects were 50(n=50). Group 2 also comprised of 50 individuals (n=50) who were healthy controls.

While a systematic random sampling approach was used to recruit study controls from all eligible controls. Written consent was obtained from all selected study subjects.

Instrument

Data was collected by interviews, using pretested and close ended questionnaire, while keeping all ethical and social considerations in mind. Data collection was supervised by the staff of Department of Community Medicine King Edward Medical University, Lahore.

Data entry and analysis was done by statistical software SPSS version 19 at computer lab of KEMU. After describing the demographic characteristics using frequency tables, simple and multivariate logistic regression was used to calculate odds ratio and their 95% confidence intervals.

Place & Duration: Urban Lahore. From Aug 2014-Sep 2014.

Inclusion and exclusion criteria: The study included respondents over age 18 who were willing to participate and to give verbal consent. Healthcare workers, students of medical profession were excluded to avoid selection bias.

RESULTS

Overall 43% were males and 57% were females. Lack of hand washing was found more in females (78%), in the age group below 15 years (100%), those who were married (86%), in engineers and teachers (both 100%), and mostly in high school graduates and college graduates (both 100%). See Fig.1, 2, 3. In bivariate analysis the psychosocial factors which were found significantly associated with lack of hand washing before meals were time shortage (OR 0.081, 95% CI=0.022-0.296), unavailability of water (OR 0.102, 95% CI=0.032-0.327), ill health (OR 0.324, 95% CI=0.140-0.752), dirty washbasin (OR:0.276, 95% CI:0.119-0.642), lack of inspiration (OR:0.265, 95%CI:0.116-0.607),

improper timing of meal (OR:0.231,95%CI:0.095-0.561), laziness (OR:0.100, 95% CI:0.037-0.266), shyness (OR:0.303, 95% CI:0.121-0.756), travelling (OR:0.381, 95% CI:0.164-0.882), frequent visits to hotels (OR:0.241, 95% CI:0.104-0.556), junk food intake (OR:0.141, 95% CI:0.057-0.347), etc. Whereas lack of awareness and lack of religious education were not significantly associated with lack of hand washing. See Table 1.

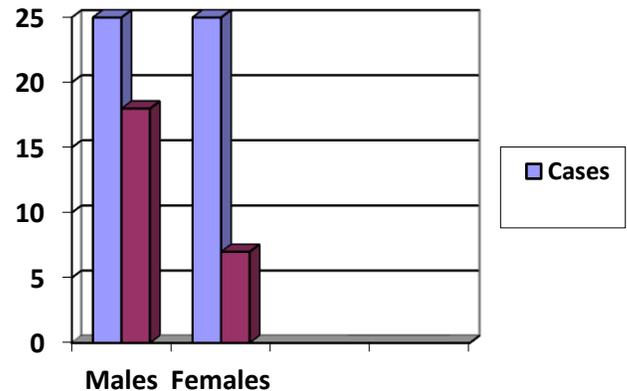


Figure 1: Gender distribution

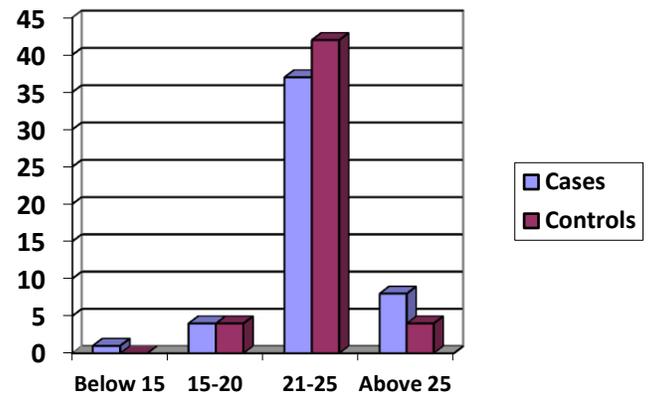


Figure 2: Age distribution

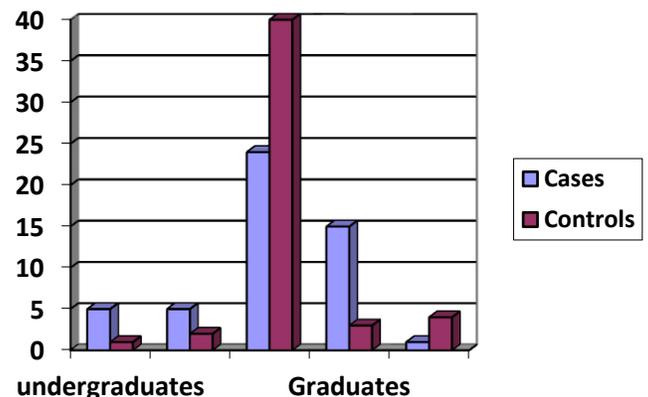


Figure 3: Education distribution

Multivariate logistic regression model was used to control for possible confounding effect. It was observed that there were some changes between the crude odds ratios. It was observed that after controlling for all the factors studied the strongly statistically significant association was exhibited by time shortage(OR:0.183,95%CI:0.045-0.743), water

unavailability(OR:0.107,95%CI:0.027-0.415), junk food intake(OR:0.181,95% CI: 0.061-0.537). Other not significantly associated factors included lack of awareness, ill health, dirty wash basin, lack of religious education, lack of inspiration, improper timing of meals, laziness, shyness, travelling, frequent eatouts. See Table 2.

Table 1: Association of Psycho-social factors with Lack of Hand washing before meals, Neela Gumbad (Anarkali) Lahore

No.	Psychosocial factors	Hand washing		Bivariate analysis			Chi-square values
		Case n=50	Control n=50	Crude odd's ratio	95% CI		
					Lower	Upper	
1	Time shortage	47	28	0.081	0.022	0.296	19.253
2	Lack of awareness	4	1	0.235	0.025	2.178	1.895
3	Unavailability of water	23	4	0.102	0.032	0.327	18.316
4	Ill health	37	24	0.324	0.140	0.752	7.104
5	Dirty wash basins	37	22	0.276	0.119	0.642	9.301
6	Lack of religious education	4	1	0.235	0.025	2.178	1.895
7	Lack of inspiration	33	17	0.265	0.116	0.607	10.240
8	Improper timings of meal	40	24	0.231	0.095	0.561	11.111
9	Laziness	43	19	0.100	0.037	0.266	24.448
10	Shyness	21	9	0.303	0.121	0.756	6.857
11	Travelling	37	26	0.381	0.164	0.882	5.191
12	Frequent visits to hotels	35	18	0.241	0.104	0.556	11.602
13	Junk food intake	40	18	0.141	0.057	0.347	19.689

Table 2: Psychosocial factors

Sr. No.	Psychosocial Factors	Hand washing		Multivariate analysis		
		Case n=50	Control n=50	Adjusted odd's ratio	95% CI	
Lower	Lower					
1	Time shortage				0.045	0.743
2	Water unavailability	23	4	0.107	0.027	0.415
3	Junk food intake	40	18	0.181	0.061	0.537

DISCUSSION

As we carried out the survey, the results clearly differentiated the psychosocial determinants for not washing hands before meals into two categories i.e. significant and comparatively insignificant. According to bivariate analysis 11 factors and according to multivariate following 3 are significant.

Time shortage was, like previous studies, a significant factor of our study as well. As we noticed busy lifestyles and more activities outside leads to this issue. Subjects simply could not find it possible to spare their precious time on washing hands before a meal. The psychological time shortage is a major issue here.⁵

Unavailability of water is coupled with the financial problems in our society. This problem is unfortunately very common and sadly growing due to the current economic situation and water shortage. People simply cannot afford basic hand washing facilities and having a simple setup to wash hands is considered a luxury by many in certain areas. The water level has gone very low in our Urban Centre and public water supply is in shambles. As a study states, people living informal settlements (i.e. slums) often pay 5-10 times more per liter of water than wealthy people living in the same city.⁶

Fast food trend is also very common these days. The availability of junk food which is ready to eat is simply not compatible with specific arrangements made to wash hands. It is hence a major issue nowadays.⁷

Ill-health which means disease and debilitation often leads to not washing hands before meals. This is also seen in our wards as when the food comes, patients do not go for hand wash.

Dirty wash basins is another issue which often leads to avoidance.

Improper timing of meals is another issue. Late working hours or all day long work often turns one's emphasis away from simple health principles. One is engaged in so many other activities and this thing is neglected.⁸

Laziness is also quite common in many aspects of our society. Subjects are often too lazy to go to the sink to wash hands before meals. In a study terms regarding positive and negative beliefs were based on how subjects made decisions relating to hand hygiene practices. Items for positive belief included perception of importance of washing and hands and

health benefits. Negative beliefs included barriers such as time, dry skin problems, and inconvenience.⁹

In public places there is some shyness involved where subjects do not want to be considered as the odd one out while washing hands. And often as no one initiates, people feel an involuntary peer pressure which forces them to avoid washing hands. Traveling also makes it very difficult to find a proper way to wash hands. Especially if we are in a bus or in a deserted place, water is hardly available to drink, let alone washing hands.

Frequent eat outs also affect this habit. Normally in functions people cannot wash hands as there is often a large gathering and not so much facility for such a crowd to wash hands before a meal.

Moreover, our study indicated that lack of awareness is not a major issue as most of the subjects were aware of the importance of washing hands to some extent. Similarly religious education was insignificant as a factor too.

CONCLUSION

Lack of hand washing was found more in females, in the age group below 15 years and in matric and graduates students. The determinants of lack of hand washing identified include shortage of time, unavailability of water and fast food trend while laziness, lack of awareness, shyness, travelling and lack of religious education were not found to be significantly associated.

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Submitted for Publication: 18-03-2016

Accepted for Publication: 25-03-2016

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