

# **Occupational Health and Safety Awareness, Knowledge of the Risks and Practices of Risk prevention of Hair and Beauty Salon Workers in Rural and Urban Areas of Western Nepal**

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## **Abstract**

There is a need to meet and maintain high standards of safety, health and hygiene so that no risk is present to workers and clients in salon/parlors. Given the fact that hair and beauty salon workers and customers are at risk, this study is focused on hair and beauty salon workers' OHS awareness, knowledge of the risks and practices of risk preventions. Based on the data collected by interviewing a total of 60 salon/parlor workers from 60 workplaces in western Nepal, the study has revealed that the level of OHS awareness, knowledge of risk and risk prevention practices among salon/parlor workers associated with their profession is satisfactory. Similarly, the level of OHS awareness, knowledge of risk and risk prevention practices associated with their profession is more satisfactory in urban area than the rural areas.

**Keywords:** *OHS awareness, knowledge of risk, practices on risk prevention, hair and beauty salon/parlor, salon/parlor's workers.*

## **Prologue**

The business of hair and beauty has played a major role in generating employment for the less educated but eager-to-learn individuals with the result that beauty salons can be seen in every nook and corner of the Kathmandu, Pokhara as well as other areas of Nepal. This is a very good business for illiterate/literate people also as it is training-based and can generate employment for both men and women. This business/industry accounts for a large percentage of small businesses both formal and informal within Nepal which has grown in recent times and its future looks buoyant but its contribution to the economy of Nepal is still undermined. In order to remain inspiring and successful, this growing business needs to meet and maintain high standards of safety, health and hygiene so that no risk is present to customers and workers. Salon workers and clients both need to become aware and acquire knowledge of occupational injuries

and diseases related to Hair and Beauty Industry, such as fall, slip and trip, repetitive strain injury as well as musculoskeletal skin and respiratory disorders and dermatitis. Therefore, awareness of OHS and its related injuries and diseases is vital for the success of Hair and Beauty Industry in Nepal. OHS is also a key element in the educational curriculum of UK, USA as well as in other developed countries but it has not yet gained attention in developing countries, particularly in Nepal.

Barbers and Hairdressers and hair and beauty industries are subjected to various occupational health risks. Problems such as poor posture, mechanical loads on the joints, prolonged standing, longer working hours, missed meals, not taking breaks during work, as well as being subjected to physical factors such as noise and higher temperatures are important occupational health risks for these people (Aliye et al, 2009). Similarly, hairdressers are exposed to a large number of chemical products in their working environments such as hair dyes, permanent wave lotion, shampoo, conditioner and various styling products –skin disorder is the main common work-related disease and ¼ of them develop respiratory disease as a result of their work (Sosted and Galster, 2009). Hairdressers are exposed to extensive wet work that can cause irritant contact dermatitis, and they have daily skin contact with innumerable cosmetic products containing compounds that are known to cause contact allergy (Lind, 2005).

Unfortunately, there is not any published book or written literatures in Nepal that can provide knowledge and promote the importance of OHS in all the work sectors. Even in educational curriculum, OSH is not included. Carter (2010) has stated that to date there is no professional occupational health education programs in Nepal and has concluded with recommendation for educating a professional work force as vital component of OHS in Nepal. So, it is obvious that awareness for OHS specifically in Salons, the Hair and Beauty Industry in Nepal is lacking. Highlighting the importance of the awareness, Lugh et al. (2010) write that occurrence of accidents and diseases vary significantly among developed and developing countries and in preventing occupational injuries and diseases, awareness plays an important role and in order to fortify safe working behaviors and to reinforce positive attitudes, awareness activities are essential.

Discovering this awareness gap, it was realized that the research would be

useful and could improve awareness of OHS and its related injuries and diseases for those engaged in Hair and Beauty Industry of Nepal. Due to the lack of OHS awareness, knowledge about risk and practices on risk preventions' data, hair and beauty salons' concerns remain invisible. Given the fact that hair and beauty salon workers and customers are vulnerable at risk, this research was focused on hair and beauty salon workers' OHS awareness, knowledge of the risks and practices on risk preventions.

## **The Problem**

HIV/AIDS still remains a major public health problem all over the world and it is a no exception in Nepal. It has caused indescribable suffering to millions of people worldwide. Prevention is the only viable way to control HIV spread, as there is no cure for the infection presently. Current drugs available can suppress the virus but they do not cure HIV infections or AIDS. Most often, efforts have focused mainly on prevention of HIV through sex, blood transfusion and mother-to-child transmission. This must have been informed by the fact that more than ninety percent of HIV/AIDS transmissions occur through the combination of these routes. However, HIV transmission through sharing of non-sterile sharp instruments such as those used for barbering, circumcision, facial scarification, incision, tattooing, ear perforation, bloodletting, injections and acupuncture have always been vaguely classified as 'others' and given less attention in the campaign against the spread of HIV.

Barbers are cosmetic workers that undertake skin-piercing practices involving re-useable sharp instruments, which present risks for transmission of HIV and other blood-borne pathogens from one client to the other. Though barbers do not carry out procedures that deliberately penetrate the skin, the procedures can inadvertently damage the skin through abrasion or minor accidental cuts. A simple nick caused by clipper or razor blade is enough for infection to occur. Due to the lipid envelope that protects HIV from dehydration, the virus can survive on the surfaces of barbering instruments for a period long enough for transmission to occur, particularly in commercial barber shops. Specific HIV-risks of barbering procedures relating to HIV transmission have been documented in Nigeria and other African and Asian countries. These authors reported incidences of accidental cuts on scalps and poor hygiene practices, including low disinfection rates of re-useable instruments (Arulogun and Adesoro). However no study seems to have documented the extent and effectiveness

of hygiene practices of the hair and beauty salons workers or barbers in Nepal.

It has been emphasized that the most important problem in these salons is the consequences that may arise from concomitant exposure to multiple chemicals. It has been reported that the inner atmosphere of the salons are not only chemically unsafe, but also environmentally unsafe in terms of temperature, humidity, lighting, and ventilation. In addition, workers in beauty parlors and hairdressers' and barbers' salons are likely to have contact with blood through processes such as cutting, manicure, pedicure, and skin care (Aliye et al, 2009). In this regards, this article tries to elaborate such problems in Nepalese context. With respect to the theme of our research, the following research questions shall be addressed in this article;

1. What awareness do salon workers have about occupational health and safety?
2. What knowledge do salon workers have about the risk?
3. What are the practices on risk prevention of hair and beauty salons?
4. Which preventive method(s) do they use?

### **Data and Methods**

Field work of this research was carried out from June to July 2011 at Pokhara, Hemja and Lamachhaur VDC in Kaski district, Gandaki zone of Nepal. These three areas were selected purposively. The population of the study is the entire salon in rural areas i.e. Hemja and Lamachhur village development committee and urban area i.e. Pokhara sub metropolis. The study covered a sample of 60 hair and beauty salons of the both rural and urban areas. In rural area, all the 30 salons were included in the study while in urban area 30 salon/parlors were selected purposively. This research was based on voluntary participation of informants; only those salon/parlor workers were included in the sample who verbally agreed to participate in the research after knowing the objectives of the study.

The direct unstructured observation and face-to-face interview were the key instruments of data collection in order to receive greater insight of the study. A set of semi-structured pre-tested interview schedule was used for collecting data. The quantifiable data were managed and analyzed using SPSS 16.0 for window. Qualitative data were managed manually and analyzed descriptively.

## Analysis and Discussion of the Findings

### 1. Selected Socio-Demographic Characteristics Of The Respondents

#### Age Of The Respondents

Most (46.7%) of the salon and beauty parlor workers interviewed in the study belonged to 16 -25-year age group. The second largest group consisted of workers of 26 -35-year age group. Other few were above 36 years. The mean age of the sample population was 27.70. The youngest worker was 16 years old and the oldest one 60 years old.

#### Education

Education has been regarded as a vehicle of change and development. To an extent, educational level affects the OHS awareness, knowledge of the risk and practice of risk prevention. Table 1 indicates that vast majority of the salon and beauty parlor workers were literate while only 10 percent workers were illiterate. But in the rural area the illiteracy rate is slightly higher than in the urban area. Of the 60 workers, almost one third (31.7%) had primary level education while majority had above secondary level education.

**Table 1: Socio-demographic characteristics of the respondents (N = 60)**

Characteristics	Rural % Rural N = 30	Urban % Urban N = 30	Total %
<b>Age of the respondents</b>			
16-25	46.7	46.7	46.7
26-35	33.3	46.7	40.0
36-45	13.3	6.7	10.0
46 +	6.7	0.0	3.3
<b>Education</b>			
Illiterate	20.0	.0	10.0
Literate	13.3	13.3	13.3
Primary Level	26.7	36.7	31.7
Secondary	26.7	3.3	15.0
Higher Secondary	13.3	33.3	23.3
Bachelor and above	0.0	13.3	6.7
<b>Professional Training</b>			
Hairstylist	6.7	10.0	8.3
Beautician	26.7	33.3	30.0

Barbering	30.0	23.3	26.7
Hair and Beauty	10.0	23.3	16.7
Self learner	26.7	10.0	18.3
<b>Work Experiences (in years)</b>			
Less than 2 years	16.7	60.0	38.3
3-5 years	3.3	6.7	
More than 5 years	80.0	33.3	56.7
<b>Source of information regarding OHS</b>			
Employers	36.7	20.0	28.3
Colleague's	13.3	6.7	10.0
While attending professional training	23.3	56.7	40.0
Did not receive any information	26.7	16.7	21.7
<b>Source of knowing legal requirements regarding OHS</b>			
Municipality Law	30.0	6.7	18.3
National Law	0.0	6.7	3.3
International Law	6.7	0.0	3.3
Any Local Regulatory bodies	56.7	43.3	50.0
No any	6.7	43.3	25.0

*Source: Field Survey 2011*

### **Professional Training**

It was found that vast majority (81.7%) of the salon and beauty parlor workers had received professional training while remaining had not. Among the untrained professional training, some had learned their skills from their parents as traditional occupation. Of the 60 workers, almost one third (30.0%) had received beautician training while second largest group (26.7%) had received barbering training. Other few had received hair and beauty and hairstylist training. Majority of the rural informants had received barbering training while some had the beauticians in urban area. Most of the self-learner workers worked in rural area.

## **Work Experience**

Majority (56.7%) of the sample population reported that they were on the current job for above 5 years period. More than one third (38.3%) informants were working for less than 2 years period. Rest few (5%) of the informants reported that they were working in the current job for 3-5 years. In comparison to rural urban area, majority (60%) of the urban worker reported that they were in the current job for less than 2 years while rural workers reported that they were in the current job for above 5 years. It shows that the working environment in rural area is better than in the urban area but it also indicates that there is less opportunity to move or shift their job and get better chance. The mean working experience of the informants was 7.43 years and the shortest working experience was 1 year and longest was 40 years.

## **Source of Information Regarding OHS**

About one fifth of the informants (21.7%) reported that they did not receive any information regarding OHS. The study also revealed that slightly higher number of rural salon and beauty parlor workers (26.7%) did not have any information regarding OHS than the urban salon and beauty parlor workers (16.7%). But majority (56.7%) of the urban salon and beauty parlor workers had received any information regarding OHS while they were attending professional training. Vast majority (78.3%) of the informants have the information regarding OHS. Majority (40%) of the informants have received information regarding OHS while they were attending professional training. Others reported that they have received information regarding OHS through their employers (28.3%) and colleagues' (10%).

## **Source of Knowing Legal Requirements Regarding OHS**

One fourth (25%) of the informants reported that they did not have any sources of knowing legal requirements regarding OHS. It means they did not receive any legal requirements regarding OHS of the salon and beauty parlor workers. Majority (50%) of the informants reported that they had received knowledge about legal requirements regarding OHS of the salon. Salon workers received such knowledge from their union (Nepal Nai Sangh and beauty parlor worker union /Nepal Saundarya Karmi Union). Other few reported that the sources of knowing legal requirements regarding OHS were municipality law (18.3%), national law (3.3) and

international law (3.3%). The informants who reported international law as their source of knowing legal requirements regarding OHS had received such knowledge while they were receiving training in India.

## **2. OHS Awareness among the rural and urban hair and beauty salon's workers**

### **Responsibility for Buying OHS Equipment**

Vast majority (91.7%) of the salon and beauty parlor workers thought that the salon and beauty parlor owner was responsible for buying occupational health and safety equipment in the salon\ beauty parlor. The study revealed that there is no significant difference between rural and urban salon and beauty parlor workers' views regarding the purchase of OHS equipment for the salon and beauty parlor.

### **Responsibility to Provide Personal Protective Equipments (Ppe)**

Majority (63.3%) of the salon and beauty parlor workers thought that the salon and beauty parlor owner was responsible to provide personal protective equipment (PPE) in the salon and beauty parlor while rest 36.7 percent thought it not to be a responsibility of the owner. There was no difference in the view regarding this among the rural and urban salon and beauty parlor workers.

### **Responsibility of Injuries or Incidents in the Salon And Beauty Parlor**

Majority (43.3%) of the salon and beauty parlor workers thought that both staff and the salon and beauty parlor owners were responsible for injuries or incidents in the salon/parlor while almost equal number of (38.3%) informants thought that the salon and beauty parlor owner was responsible for any injuries or incidents in the salon. Other few (13.3%) thought that the staffs were responsible and few reported that salon union (5%). The salon/parlor workers who thought the staff were responsible for injuries or incidents in the salon are more in urban than the rural areas.

### **Knowledge of the Name and Potential Toxicity of the Chemicals used**

Majority (65%) of the informants had the knowledge of the name and potential toxicity of the chemicals used. But there were vast differences in the rural and urban workers. Table 2 shows that 90 percent of the urban salon/parlor workers had the knowledge of the name and potential toxicity of the chemicals used while only 40 percent of the rural workers had such



knowledge. Likewise, 35 percent of the informants did not have any knowledge of the name and potential toxicity of the chemicals used. It also reveals that more rural workers were at the risk of hazards and potential toxicity of the chemicals used in the salon/parlor than the urban workers.

**Table 2: OHS Awareness among rural and urban beauty salon (N = 60)**

<b>Questionnaire items</b>	<b>Rural % Rural N = 30</b>	<b>Urban % Urban N = 30</b>	<b>Total %</b>
<b>Salon owner's responsibility for buying OHS equipment</b>			
Yes	93.3	90.0	91.7
No	6.7	10.0	8.3
<b>Salon owner's responsibility to provide PPE</b>			
Yes	63.3	63.3	63.3
No	36.7	36.7	36.7
<b>Responsibility of injuries or incidents in the salon and beauty parlor</b>			
Owner	40.0	36.7	38.3
Staff	6.7	20.0	13.3
Both	43.3	43.3	43.3
Nai Sangh (Salon Union)	10.0	.0	5.0
<b>Knowledge of the name and potential toxicity of the chemicals used</b>			
Yes	40.0	90.0	65.0
No	60.0	10.0	35.0
<b>Pre-employment medical examination</b>			
Yes	10.0	.0	5.0
No	90.0	100.0	95.0
<b>Periodical medical examination</b>			
Yes	10.0	3.3	6.7
No	90.0	96.7	93.3
<b>Salon owner notify hazards in the salon</b>			
Yes	40.0	86.7	63.3
No	60.0	13.3	36.7
<b>Assignment of staff to take part in OHS education program</b>			
Yes	10.0	63.3	36.7
No	90.0	36.7	63.3

Source: Field Survey 2011

## **Pre-employment Medical Examination**

Vast majority (95%) of the informants reported that the owner of the salon did not provide any pre-employment medical examination. Other few (5%) reported that the owner of the salon/parlor provided pre-employment medical examination. All of the urban informants and 90 percent of rural informants reported that the owner did not provide pre-employment medical examination.

## **Periodical Medical Examination**

Vast majority (93.3%) of the informants reported that the owner of the salon did not provide any periodical medical examination. Other few (6.7%) reported that the owner of the salon/parlor provided periodical medical examination. 10 percent of the rural informants and 3.3 percent of urban informants reported that the owner provide periodical medical examination.

## **Notification of the Hazards**

Majority (63.3) of the informants reported that the owner of the salon/parlor notify hazards in the salon/parlor while 36.7 percent reported that the owner does not notify hazards in the salon. The study revealed that vast majority (87%) of the urban salon owners notify hazards in the salon to their workers while majority (60%) of the rural salon owners did not notify hazards in the salon/parlor. It means the rural salon/parlor workers are more at risk of hazards in the salon than the urban salon/parlor workers.

## **Assignment of Staff to take part in OHS Education Program**

Majority (63.3%) of the informants reported that the owner of the salon/parlor did not assign any staff to take part in OHS education program while 36.7 reported that the salon owner assigned staff to take part in OHS program. Majority (63%) of the urban salon workers got the opportunity to take part in OHS education program while only 10 percent of rural salon workers got this opportunity.

## **3. Knowledge about Risk Related to Hair and Beauty Salon's Workers**

### **Knowledge about Skin Diseases**

Majority (60%) of the salon/parlor workers have the good knowledge about skin diseases such as allergies, irritants, skin cancer, infection and dermatitis while 40 percent workers did not have any knowledge about

such diseases. 80 percent of the urban workers were knowledgeable about skin diseases whereas only 40 percent of the rural workers were knowledgeable about such diseases.

### **Knowledge about HIV Related Diseases**

A simple cut caused by clipper or razor blade is enough for infection to occur. The risk of transmitting HIV is high in the salon in the rural area because one third (33%) percent of rural salon/parlor workers did not have any knowledge about HIV related diseases. Health education strategies such as training, supportive supervision are needed to facilitate the adoption of effective precautionary measures against HIV infection among workers. Cent percent of the urban salon workers and 67 percent of the rural salon workers were knowledgeable about HIV related disease.

### **Knowledge about Hepatitis B or C**

Hepatitis B and C virus infections are serious global health problems. Shaving by barbers has been identified as the key risk factor for spread of Hepatitis B or C. 53.3 percent salon workers were knowledgeable about hepatitis B or C. Majority (67%) of the urban salon worker were knowledgeable about such diseases. Knowledge about the hepatitis B or C among the rural salon workers (60%) was poorer than among the urban salon workers (67%); only 40 percent rural salon workers have knowledge about such diseases.

### **Knowledge about MSD**

53.3 percent salon workers were knowledgeable about MSD (musculoskeletal disorders) such as joint pain, repetitive strain injury. Majority (67%) of the urban salon worker were knowledgeable about such diseases. Knowledge about the MSD among the rural salon workers (60%) was poor than among the urban salon workers (67%).

### **Knowledge about the Role of Contaminated Blades, Clippers, Towels, Aprons and Combs in Causing Skin Disease**

Vast majority (83.3%) of the salon/parlor workers reported that they have the knowledge about the role of contaminated blades, clippers, towels, aprons and combs in causing skin diseases and problems while few others (16.7%) reported that they did not have any knowledge about the role of

contaminated blades, clippers, towels, aprons and combs in causing skin disease. The rural salon workers' (26.7%) knowledge about the role of contaminated blades, clippers, towels, aprons and combs in causing skin problems was slightly lower than the urban salon workers (6.7%).

### **Knowledge about the Razor/blades as the Potential Sources of Contamination**

Vast majority (96.7%) of the salon/parlor workers knew that the razor/blades are potential sources of contamination. All of the urban salon workers knew that the razor blades are potential sources of contamination while 93.3 percent of the rural salon workers knew about this.

**Table 3: Knowledge about Risk (N = 60)**

<b>Questionnaire items</b>	<b>Rural % Rural N = 30</b>	<b>Urban % Urban N = 30</b>	<b>Total %</b>
<b>Knowledge about skin diseases</b>			
Yes	40.0	80.0	60.0
No	60.0	20.0	40.0
<b>Knowledge about HIV related diseases</b>			
Yes	66.7	100.0	83.3
No	33.3	0.0	16.7
<b>Knowledge about Hepatitis B or C</b>			
Yes	40.0	66.7	53.3
No	60.0	33.3	46.7
<b>Knowledge about MSD</b>			
Yes	40.0	66.7	53.3
No	60.0	33.3	46.7
<b>Knowledge about the role of contaminated blades, clippers, towels, aprons and combs in causing skin disease</b>			
Yes	73.3	93.3	83.3
No	26.7	6.7	16.7
<b>Knowledge about the razor\blades are potential sources of contamination</b>			
Yes	93.3	100.0	96.7
No	6.7	0.0	3.3
<b>Clients or staff can slip on cut hairs</b>			
Yes	30.0	33.3	31.7
No	70.0	66.7	68.3

<b>Clients or staff can slip on wet floor</b>			
Yes	6.7	26.7	16.7
No	93.3	73.3	83.3
<b>Knowledge about the emergency procedure in case of fire in the salon</b>			
Yes	53.3	73.3	63.3
No	46.7	26.7	36.7

*Source: Field Survey 2011*

### **Clients or Staffs Slip on Cut Hairs**

Almost one third (31.7%) of the salon/parlor workers reported that the clients or staff slipped on cut hairs in their salon and almost equal number of the rural and urban salon workers reported the same information. Majority (68.3%) of the workers reported that the clients or staff did not slip on cut hairs. The study revealed that the risk of clients or staff slipping on cut hairs in rural and urban salon is equal.

### **Clients or Staffs Slip on Wet Floor**

16.7 percent salon/parlor workers reported that the clients or staff slipped on wet floor while vast majority (83.3) of the workers reported that the clients or staff did not slip on wet floor. Clients or staff's slip on wet floor is slightly higher in urban area than the rural area.

### **Knowledge about the Emergency Procedure in Case of Fire in the Salon**

Majority (63.3%) of the informants reported that they have the knowledge about the emergency procedure in case of fire in the salon while 36.7 percent of the informants reported that they have no any knowledge about the emergency procedure in case of fire in the salon. The urban salon/parlor workers (73%) were more knowledgeable about the emergency procedure in case of fire in the salon than the rural salon/parlors workers (53%).

## **4. Practices on Risk Prevention**

### **Washing Hands before Client**

Although all the rural and urban informants reported that they washed their hands before each new client, but the researchers observed in some cases, the informants did not wash their hands before each new client.

### **Using Gloves During Wetwork**

In this study, majority (56.7%) of the beauty parlor/salon workers did not

use surgical gloves during the wet work. The percentage of the workers who did not use surgical gloves during the procedures is higher (70%) in rural area than the urban area (43%). Only 43 percent of the workers used surgical gloves during the procedures. Majority (57%) of the urban workers used surgical gloves during wet work while only 30 percent of the rural workers used surgical gloves during wet work.

### **Using Gloves while Mixing Color**

Although the majority (56.7%) of the salon/parlor workers did not use surgical gloves during the wet work, vast majority (83.3%) of the salon/parlor workers wear surgical gloves while mixing colors. Majority of the workers wear gloves while mixing colors because they got free surgical gloves in color packets. Only few (16.7%) reported that they did not use surgical gloves during mixing colors. The number of workers who wear gloves during mixing colors is slightly higher in urban area (90%) than the rural area (77%).

### **Salon/parlor Providing Gloves**

Vast majority (83.3%) of informants reported that the salon owner provided surgical gloves while 16.7 percent of the informants reported that the salon owner did not provide gloves. Slightly higher percent (86.7%) of the urban works reported that the salon owner provided surgical gloves than the rural workers (80%). Although the 83.3 percent informants reported the salon owner provided surgical gloves but only the 56.7 percent of the informants used surgical gloves during the wet works.

### **Cleaning Equipment with Disinfectant between Clients**

Vast majority (86.7%) of informants reported that they cleaned the equipment with disinfectant between clients while 13.3 percent of the informants reported that they did not clean. Aithe urban informants reported that they cleaned equipment with disinfectant between clients while only 73.3 percent of the rural informants revealed such information. The study found out that more urban workers (100%) cleaned equipment with disinfectant between clients than the rural workers (73.3%).

### **Washing Equipment after Shaving Clients**

All the salon/parlor workers interviewed reported washing hands and equipment after shaving clients. But the researchers observed that in some

cases the informants did not wash their hands before each new client. The study revealed that there is no significant difference between rural and urban salon workers' equipment washing practices after shaving clients.

### **Using new Razor/blade on new Clients**

8.3 percent of the salon/parlor workers did not use new razor/blade on new clients while vast majority (91.7%) of the workers used new razor/blade on new clients. The study revealed that more rural worker (13.3%) than the urban worker (3.3%) did not use new razor/blade on new clients.

### **Reusing Towels**

Vast majority (81.7%) of the salon/parlor workers reported that they reused towels on new clients while only 18.3 percent reported that they did not reuse towels on new clients. The table shows that more rural workers (90%) reused towels on new clients than the urban workers (73.3%).

### **Washing Scissors, Clippers with Anti-septic Solution**

All the salon/parlor workers reported that they washed scissors, clippers, and equipment with anti-septic solution after shaving clients. The study revealed that there is no any significant difference between rural and urban salon workers' practices of washing scissors and clippers with anti-septic solution.

### **Anti-septic Solution using in Disinfect Skin Cuts**

All the rural and salon workers disinfected skin cuts. Among them, vast majority of rural and urban workers (86.7 % and 96.7% respectively) disinfected skin cuts using Dettol and alum (fidkiri). Alum is the second most (53.3%) most used disinfectant in rural area while Savlon is also used in its place. Other few reported that they used tape and betadine ointment along with Dettol or alum.

### **Practices of Fire Drill**

All the rural salon/parlor workers and 83.3 percent of the urban workers reported that they did not practice fire drill in their salon while 16.7 percent of the urban salon workers reported that they practiced fire drill. It was found that most of the salon/parlor was established in rented houses/offices and the house owner did not provide fire drill and salon owner also did not buy fire drill saying it was not their own houses. It means there is high risk of fire in hair and beauty salons.

### **Taking Break During Work**

Almost same percent of the rural and urban salon workers (63 % and 70% respectively) reported that they took break during work while one third (33.3%) of them reported that they did not take any break during work.

### **Performing Proper Disinfection/Sterilization of Equipment**

Vast majority of the rural and urban salon workers (80% and 93.3) reported that they performed proper disinfection/sterilization of equipment such as scissor, clippers, brush, and comb while 13.3 percent of them reported that they did not perform such practices. Slightly higher percentage (20) of rural salon workers did not perform such practices than the urban salon workers (6.7%).

### **Frequency of Performing Decontamination/Sterilization of Equipment**

52 salon/parlor workers performed disinfection/sterilization of equipment such as scissor, clippers, brush, and comb. Among them, majority of the workers (65.4%) sterilized equipment once in a day while 21.2 percent reported each time. Other few reported that they sterilized equipment occasionally (5.8%), weekly and thrice a week (3.8%). More urban salon workers (35.7%) sterilized equipment each time than the rural workers (4.2%). Although the majority of the workers performed sterilization of equipment, the study revealed that they did not have proper knowledge about it. The study further revealed that the knowledge of proper performing of sterilization of equipment is poor in rural area than the urban area.

### **Using Rubber Shoes**

41.7 percent of the salon/parlor workers reported that they used rubber shoes in salon while majority (58.3%) of them reported that they did not use rubber shoes in salon. The study revealed that the workers used rubber sandal rather than the rubber shoes. Majority (60%) of the urban salon workers used rubber shoes while 23 percent of the rural salon workers used rubber shoes.

### **Changing Aprons for each Client**

Majority (66.7%) of the salon/parlor workers reported that they did not change aprons for each client. One third (33.3) reported that they changed aprons for each client. Slightly higher percent of the urban workers (46%) changed aprons for each client than the rural workers (23%). The study



revealed that more clients are at high risks of aprons caused diseases such as dermatitis, irritation, skin cancer, etc. because they most frequently reused aprons for new clients. The study further revealed that the most of the salon/parlor workers also did not wear apron while at they were working or cutting hair and so on.

### **Adequate Ventilation**

It is important that the salons/parlors are well ventilated. More than one third (38.3%) of the salon/parlor workers reported that they did not have adequate ventilation facility in their salon/parlor while 61.7 percent workers reported that they had adequate ventilation facility. Majority (53.3%) of the rural salon workers reported that they did not have adequate ventilation facility while only 23.3 percent urban workers revealed such a fact. The study revealed that most of the salon/parlors were established in small rented room.

### **Adequate Lighting**

78.3 percent of the salon/parlor workers reported that they had adequate lighting system in their salon/parlor. They used emergency light and inverter as the secondary source of lighting in the time of load shedding. Few other (21.7%) reported that they did not have adequate lighting system in their shop. More urban salon/parlors (93%) have adequate lighting system than the rural salon/parlors (63%).

### **Provision for Hand Washing**

Almost all the salon/parlor workers reported that they have provision for hand washing while only 6.7 percent of the rural workers reported that they did not have any provision for hand washing.

### **Provision for Safe Drinking Water**

Vast majority (88.3%) of the salon/parlor workers reported that they have provision for safe drinking water while 11.7 percent of them reported that there was no provision for safe drinking water. Slightly higher percent (20%) of the rural worker reported that there was no provision for safe drinking water than the urban workers (3.3%).

### **Adequate Toilet Facility**

93.3 percent of the salon/parlor workers reported that they had adequate toilet facility in their salon/parlor. All the urban salon workers reported

that they had adequate toilet facility while 13.3 percent of the rural salon workers reported that they did not have it in their salon/parlor.

## 5. Final Remarks

The level of OHS awareness, knowledge of risk and risk prevention practices among salon /parlor workers associated with their profession is satisfactory. But, the level of OHS awareness, knowledge of risk and risk prevention practices associated with their profession is more satisfactory in urban area than the rural areas. There is highly significant difference between urban and rural salons with regards to their knowledge of risks. In conclusion, there were relative differences between urban and rural salons in OHS awareness, practices and risks to staff and customers. There was significant difference between urban and rural salons with regard to their OHS awareness, knowledge of risks and practices on risk prevention.

The study revealed that there were no pre-employment and periodical medical examination facilities to both rural and urban salon workers. Most of the salon/parlor workers notified hazards in salon and assigned to take part in OHS education program to their workers but the number was significantly high in urban salon than the rural salon. The knowledge of the salon/parlor workers about the risk related to salon was also pleasing but the knowledge about risk related to salon was different among the rural and urban salon workers. Majority of the salon/parlor workers were knowledgeable about skin diseases. The study also revealed that the vast majority of the salon workers were knowledgeable about the role of contaminated blades, clippers, towels, aprons and combs in causing skin disease and knowledge about the razor/blades as the potential sources of contamination but slightly higher percentage of urban salon workers have such knowledge than the rural salon workers.

Like the OHS awareness and knowledge about risk, practices on risk prevention in salon/parlor were also adequate but the practices were different among the rural and urban salon workers. The study also revealed that there was adequate ventilation, lighting system, toilet facility, provision for hand washing and safe drinking water in urban salons than the rural salons. In addition, this study also found that sanitation and sterilization of equipment used in workplace, and the wearing of protective clothing were not satisfactory. Most of the rural and urban salon/parlor workers did not have proper knowledge of sterilization, so they reused towels

and did not change apron for each clients. They did not know this may cause skin diseases, HIV, Hepatitis B and so on. On these all, urban salon workers have higher knowledge than the rural salon workers. It means the higher percentages of the rural clients are at risk than the urban clients. Therefore, practical-oriented training should be organized for the salon/parlor workers on equipment decontamination with emphasis on the use of correct procedure and potent decontaminant.

The study revealed that most of the workers did not wear gloves, rubber shoes and apron while they were at work. Thus, salon/parlor owner should provide protective clothing, e.g. gloves, mask, apron, rubbers shoes, goggles, etc. for both staff and clients. In sum, messages about skin diseases, HIV and hepatitis B or C, etc. need to be incorporated in media campaigns, in addition to regulation of risk prevention practices. Salon/parlor workers and clients must be aware of the possible transmission of HIV/AIDS and Hepatitis B or C and skin diseases. Further separate in-depth study is needed to learn about skin diseases, HIV and hepatitis B among the salon/parlor workers.

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