

14

Colouring and Perming

14.1 Introduction

Color is dynamic, it can be used to express personality, mood, fashion and time. Hair coloring is being done since ages. In today's world coloring has become simple and a wide variety of colors are also available. So let us see what colors are used and how it is done.

14.2 Objectives

After reading this lesson you will be able to:

- Know the meaning of Colouring and Perming
- Classify hair colouring
- Master the procedure of hair colouring
- Acquire the skills for sectioning of hair for perming
- Suggest precautions for colouring & perming

14.3 Study of Colour

- (i) Primary colour
- (i) Secondary colour

(i) Primary Colours

Every colour we see is obtained from red-yellow-blue. We can't obtain these colours by mixing other colours together. They exist on their own.

(ii) Secondary Colours

These can be obtained by mixing equal proportions of the primary colours together.

Red + Blue = Mauve or Violet

Blue + Yellow = Green

Red + Yellow = Orange

14.4 Definition and Classification of Hair Colouring and Tinting

It is the art of changing the natural colour of the hair.

Its main chemical ingredient is known as para phenylene diamine

Classification of Hair Colours

(a) Vegetable hair colours

(b) Chemical hair colours

(a) **Vegetable Hair Colours** : Only coats the hair shaft. It only effects the cuticle layer. They are also grouped under permanent dye, because the colour impact left on the hair shaft is permanent. It does not change the basic structure of hair hence it is possible to apply penetrating tints and perming treatment to them. Henna, indigo, sage, cammomile are all listed under vegetable dyes. Henna is the most common dye used these days and the tones imparted by it to hair range from golden brown to red.

(b) **Chemical Hair Colours**

Penetrating Tints or Aniline Dyes

These are most commonly used these days. The penetrating tints effect the cortex layer of hair. The natural colour pigment is found in this layer.

Material Required for Chemical Dyes

Dye, Dye Brush, Plastic/glass bowl, timer

Procedure

- (1) Analyse the result of patch test and check the scalp.
- (2) Divide the hair in four equal (from ear to ear and from middle of forehead till nape).
- (3) Prepare the mixture according to manufacturer's instruction and wear gloves.
- (4) Start applying dye on the area in which the hair are resistant (cream area)
- (5) By taking a thin strand at a time, apply the dye.
- (6) Save about $\frac{1}{4}$ part of the dye mixture. After you have applied the dye on the whole head, set the time and on the spots which have been left or on the spots where dye is needed, reapply the dye according to manufacturer's instruction. Keep the dye on hair for the prescribed time. Wash out the dye with lukewarm water. Wash the hair finally with milk shampoo.
- (7) Check if there are any stains of dye near the hair line, face, neck or ears, remove them.

Precautions

- (1) Before hair colouring treatment examine the patron's scalp to check for cuts or abrasions.
- (2) Drape the patron carefully so that dye does not fall on her clothes.
- (3) Patch test should be done 24 hrs before the actual dye to be used, especially when using aniline dyes.
- (4) Follow the manufacturer's instructions for all hair colouring procedure.
- (5) Always use glass or plastic container for mixing dyes.

Types of hair dye

There are two main methods of classifying hair dyes— which can be done in terms of their ingredients and their permanence.

Ingredients

The chemical nature and action of the active ingredients can be subdivided into:

1. **Vegetable dyes** – these are extracted from plants and include camomile and henna. Camomile, for example, is a golden-yellow dye obtained from the flower of the coamomile plant. This dye has large molecules which will not penetrate the hair shaft and therefore coats the cuticle. It can be used to add golden tones to faded blondes.
2. **Metallic (or inorganic) dyes** – which contain the metal salts of metals like lead, copper and iron.
3. **Synthetic organic dyes** – which are 'man-made' substances and the most common ingredient in salon tints. A number of different chemicals come under this heading including the 'para' group.

Permanence

The permanence or how long the dye lasts on the hair can also be subdivided into:

1. Non-permanent dyes which last until the hair is next wet, e.g. at the next shampoo, and then wash out. Other types last longer (6 to 8 shampoos) but eventually wash out as well.
2. Permanent dyes which last until the tinted hair grows out.

Material Required for Henna Dye

- (A) Decoction of either tea or coffee

Amla, mehendi, Egg,

Harad and baheda powder

Mix the above in the mehndi bowl to a smooth thick paste.

We also need hot water, tint brush, plastic cap, mehendi bowl, gloves, 2 towels.

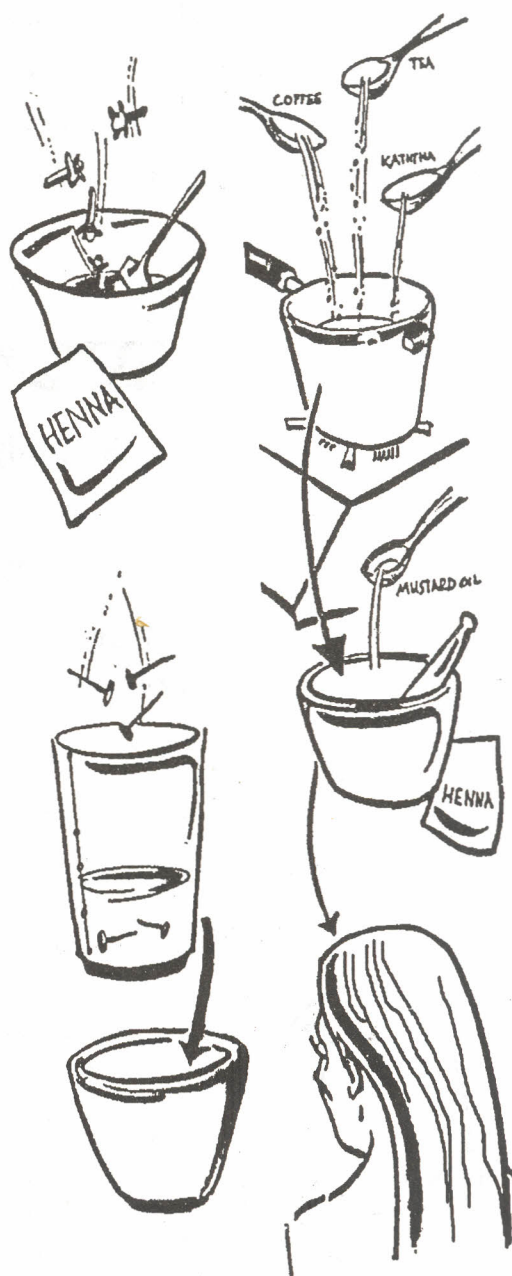
Procedure

- (1) Get the equipment ready and drape the client.

- (2) The hair is shampooed and dried to almost dry but not completely dry. Some people prefer washing the hair afterwards. It has been found in practise that shampooing the hair immediately afterwards removes some of the colour.
- (3) Part the hair in four sections. Make ¼ thick subsections and apply henna to both sides of the strand. Unlike tints, the hair can be pasted one strand on another for henna.
- (4) Henna starts dripping after a while because of the body warmth. Clean up around the hair line and over the ears, place wads of cotton wool on the ears and nape and wrap a plastic cape around the head.
- (5) Wait for ½ to 2 hours depending in the result desired.
- (6) Now rinse thoroughly
- (7) The hair can be dried and styled.

Precautions

- (1) Add egg just before applying henna.
- (2) Place wads of cotton wool on the ears and nape to stop henna dripping.
- (3) Wear gloves, because henna covers the nails more permanently.
- (4) Apply henna with the help of a tint-brush for equal distribution.



Preparation of Henna mixture for Application of hair

Intext Questions 14.1

Fill in the blanks

1. Hair colours are of 2 types _____ & _____.

Notes

2. Secondary colours can be obtained by mixing of 2 _____ colours together.
3. Patch test should be done _____ ahead of actual process.
4. Hair dyes are classified on the basis of _____ and _____.

14.5 Perming and Straightening

Hair Analysis

A very important step before giving a permanent wave is to make a correct and careful analysis of the patron's scalp and hair condition.

Scalp Examination : The scalp should be examined very carefully. Abrasions on the scalp can make cold waving dangerous for the patron.

Hair porosity : Porosity is the ability of the hair to absorb fluids or liquid.

Sectioning of Patterns

a) Straight back Patterns

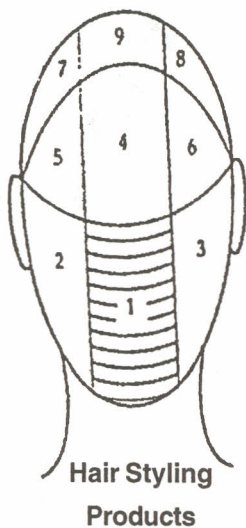
It has nine sections, and the effect of perming is equal on all sides.

b) Rod Selection and Wrapping

The selecting of the size of the rods you are going to use is of great importance as rod size determines the size of the curl pattern.

Permanent wave rods vary in size from extra large to extra small.

When giving a permanent wave, keep in mind that the size and number of rods used will vary with each patron. What size rods you use will depend on the type of the curl your patron wants and the texture, elasticity and the length of the hair.



- c) **Wrapping** – Book wrap (End papers/tissue papers) are used to hold the hair in position during curling.

Material Required

Neck strip,	End papers,	Cotton strip,
Shampoo cape,	Waving lotion,	Clips,
Combs,	Neutralizer,	Scissors,
Applicators,	Neutralizer cape,	Gloves,
Permanent wave rods,	Mild shampoo,	
Plastic cap,	Protective cream.	

Procedure

- (1) Drape the patron
- (2) Examine hair and scalp.
- (3) Shape the hair if you are going from long to short.
- (4) Section hair in the desired pattern.
- (5) Moisten the hair with curling lotion. Avoid contact with the scalp.
- (6) Subsection and wrap the hair starting from nape area.
- (7) Reapply waving lotion to the wrapped hair.
- (8) Test curls according to the manufacturer's instructions.
- (9) After test curls show that the hair has processed to the desired curl, thoroughly rinse the waving lotion from hair with tepid water, so that the neutralizer can work better. Rinsing time will depend upon the amount of hair on the rod.
- (10) Blot the hair dry with a towel.
- (11) Beginning in crown area, apply neutralizer in the same way that you applied waving lotion. Reapply neutralizer to the top of the curls. No indicator can tell you when the neutralizer has penetrated to the centre of each curl, but

Notes

practical experience has shown that hair will reharden in about 5 minutes. Follow the manufacturer's instructions.

- (12) Gently unwind the rods.
- (13) Neutralizer may be worked through the hair again at this point.
- (14) Rinse the neutralizer from the hair.
- (15) Towel dry, check curl and style the hair.
- (16) Clean up, sanitize equipment, discard used supplies.

Precautions

- (1) Always follow manufacturer's directions exactly.
- (2) Always examine the scalp.
- (3) Apply protective cream around the patron's hair line.
- (4) Use a cotton strip around the hair line to protect the patron's face and neck from lotion.
- (5) Be sure to neutralize thoroughly.
- (6) Take test curls every few minutes during processing if necessary.

Perming is most often used to wave or curl the hair. The style is permanent in that it can only be removed by 'growing out' (new hair with the person's natural style replacing the permed hair), or by perming the hair again (which can be called a reverse perm or straightening). There are several methods of actually perming hair, but the most common is called cold permanent waving (or just cold perm for short) as it is cold in comparison to other methods that use heat to perm the hair.

There is a lot of practical expertise needed in perming but the basic operation can be thought of as three stages, which are:

- 1. **Softening** – by using the perm reagent ('reagent' simply means 'something that reacts', in this case, with the hair).
- 2. **Moulding** – which in practice consists in rolling or combing the hair to give the required amount of curling or straightening.

3. **Fixing** – which then permanently 'fixes' the hair in the styled position. This last stage is often called neutralization and the chemical used is a neutralizer.

Curl strength is controlled by –

Strength of lotion

Processing time

Processing temperature

Size of mesh

Size of curler

As stated the principle of cold waving is based on the three stages, softening, moulding, fixing. It is easy to understand that with the hair softened by the lotion, and moulded by the curler (the diameter of the curler chosen to do the moulding will determine the diameter of the curl) and the curl strength. Once the curler has been chosen and the hair wound on it the maximum curl strength obtainable will have been determined. Thus it will easily be understood that absolutely correct assessment and curler choice are imperative.

Straightening of Hair

This is the process of reducing curl or wave to make it straighter. Hair can be straightened either temporarily or permanently. Straightening the hair temporarily usually requires some form of heat if it is to be successful. The two main methods of temporarily straightening the hair are:

- (a) wet setting – such as blowdrying, roller setting, etc.
- (b) dry setting – pulling the hair straighter using heated curling tongs, hot brushes, heated rollers or specifically designed flat irons that work on the same principle as crimping irons but trap the hair between two flat heated surfaces.

Straightening the hair permanently requires the use of chemicals to alter the internal structure of the hair.

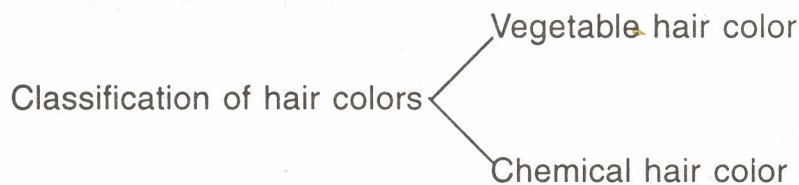
Intext Questions 14.2

State whether following statements are True or False

1. Red, Orange, and green are primary colours.
2. The clients scalp must be checked for cuts or abrasion before colouring.
3. Mehendi colouring is a permanent colouring of hair.
4. The size of curling rod will effect the size of the curl.
5. Hair porosity doesn't affect the absorption of colour.

14.6 What have you learnt

Colors – Primary, secondary;



- Perming — Hair analysis
— Scalp examination
— Hair porosity

14.7 Terminal Questions

1. What is the main ingredient of hair dyes?
2. Write in brief about vegetable hair dyes?
3. Write in brief about chemical hair colours?
4. What points will you keep in mind while selecting rods for perming?
5. What reminders will you keep in mind before perming?

14.8 Answers to Intext Questions

14.1

1. Vegetables and chemicals
2. primary
3. 24 hrs
- 4 ingredients and permanence

14.2

1. False
2. True
3. False
4. True