### **Traditional Farriery in Pakistan**

#### **Contents**

- Historical Perspective regarding Farriery
- Little bit of knowledge review regarding Farriery including horse hoof anatomy,
  - Need of Shoeing
  - Shoeing Methods
  - Ground Realities
  - Vet Opportunities
    - ETC

# Historical Perspective

 Farriery is in routine practice since olden and golden days from Turkish origin of The Mughal's empire in the Indo-Pak subcontinent including Persia. In Farsi shoeing is called "Na'al Bandi". When there was British Raj in India, The Britishers used clop clopping of horses and Bagi culture was common like officials used to travel in horse driven chariots and were warm welcomed, Before this The Mughal King along with chariot used to come in fort and the fort floor was designed in such a way to prevent slippage of horse hooves by having smooth furrows and serrated surface and the clop clopping was a signal of their entry depicting various alertness levels.

# Rare pictorial of old farriery



by Aligarh
University
published
paper on
Horse
shoeing in
Mughal
Empire

## Need of Horse shoeing

Much more thought provoking is that horse and its horse shoe along with its stance is mentioned in the Holy Qur'an in Surah Al Adiyat, English-Urdu transliteration: The War Horses which run swiftly (gallop gait).

Moreover although above mentioned is sufficient but there is no conflict to mention that English idiom also says

"No Hoof No Horse" means Hoof is to horse is same as teat is to buffalo. Is pretty self explanatory, emphasizing that there is a need of farriery, because, for horses to run on metalled road having concrete in it, farriery is mandatory.

# Little bit Revision of Horse Hoof Anatomy

- Sole
- Frog
- Heel bulbs
- White line
- Bars
- Coronary band
- Wall

Things need to be explained by voice will be addressed during zoom, Although we all know about horse anatomy.

Frog " the most sensitive part"

#### **Interesting Facts**

- 9-12 Months required for hoof wall growth from coronary band to ground.
- Trimming should be done regularly every 6-12 weeks, depending on the rate of hoof growth and wear.
- Donkey's feet are always narrower than horses.

#### Reference

- 1. Page # 361 Chapter # 14 entitled The Musculoskeletal System, Subtopic Hoof Anatomy & Conformation.
- Page # 367 AS ABOVE BUT UNDER TOPIC OF Trimming and Shoeing.
- 3. Page # 369 As above but in half of the page.

Book name The Working Equid Veterinary Manual. Courtesy by Brooke

### Shoe Fitting

- Hot Fitting (Shoe hottened in order to fit in place).
- Cold Fitting (Cool shoe is fitted in place).

Benefits of former.

- Feet becomes dry.
- Germicidal.
- Uneven surface of hoof can be known that can be rasped to make it smooth.

Contrary to above is cold one in which cold shoe is mold by hammer to fit it properly.

• **Bearing Surface** is that surface where shoe has to be fitted in hoof. It includes lower embankment of hoof wall & external edge of white line and sole.

#### **Precautionary Measures**

- Frog not to be cut. Although traditional farriers cut this, will discuss in detail in coming slides.
- External edge of hoof wall must not be peeled off because it has water proof membrane that protects hoof from water erosion & hoof brittleness.

- Rather Traditional farriers to say, it is more appropriate to say in such a way that hoof quacks tend to make the hoof look beautiful regardless of considering it function actually. Moreover, without knowing that above mentioned will lead to fatal consequences like, hoof will be easily crack able, so wall not to be rasped.
- The purpose of shoeing is to prevent the hoof grating of the lower surface of hoof.
- Likewise all four hooves of a soliped must be routinely checked.

Cart driver says

When they take their horse/donkey to a farrier?

#### Ans

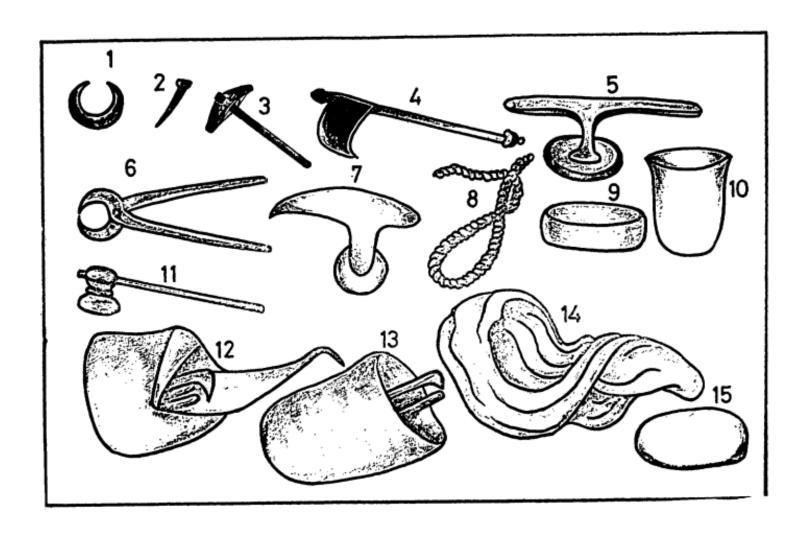
- As needed!
- Depends on their work load.
- Depends on their nature of work like one is carrying load of cloth, another one is carrying tonnes of iron, wooden logs, one has to mean with donkey race, one has to collect garbage.
- One man said that Summer Shoeing & Winter Shoeing also varies.

## Cont... & Nailing and Hammering

• It means shoeing also depends on season.

When a horse, whole shoeing done, it must be ensured that gentle to moderate hammering stroke applied in order to fool proof the nails, that the nails are either in live part of hoof or not. Horse will retract its limb if after applying a force. If so remove the nail and place it properly. Very often while shoeing, when nail embedded, horse tries to flex its coffin bone joint, if so it goes in its live part. This condition is called "Nail Bound". Actually at that time in order to avoid cumbersome events while nailing, nails must be very prudently placed.

 Two Nails in the inner quarter of hoof & Three nails outside it per hoof.



Horseshoeing instruments

## Shoe fitting is helpful! How?

- It is helpful in a variety of ways.
- 1. Limb Disease Diagnosis
- 2. Lameness Diagnosis
- 3. Routine Procedure
- 4. Canker/Foot Rot (Treatment for its excellent effectiveness).
- 5. Preventive
- 6. Cosmetic
- 7. Prevention of horse/donkey to become abandoned

- Corns (Self-heal but old shoe needs to be removed).
- Thrush (Correct heel trimming).
- Contracted Heels (Inadequate trimming of the heels leads upright foot with a broken-forward hoof-pastern axis and avoid tight shoeing.
- Now good regular farriery will improve contracted heels.
- Faulty shoeing leads to heel shearing lead to heel imbalance.

## Therapeutic Trimming

- Aim is to give relief to an odd toed ungulate (horse/donkey).
- Especially In treatment protocol of Chronic Laminitic Foot.

### **Principle**

- Realign the pedal bone.
- With Hoof wall after rotation.
- Trimming alone cannot force alignment but it does enable normal growth patterns to be re-established.

## Now What about of Modern Farriery

#### Research suggests that

- Biomechanical analysis of horse shoeing by Japan in 1999.
- Finite element analysis (FEA) as a model to predict effects of farriery on the equine hoof 2010 (ELEVEN YEARS LATER BY BEVA.
- Exchange programs between UK and US on farriery.
- Farrier licensing (30 years / 3 decades back in UK).
- Farrier salary is huge.

## Comparison & Contrast Analysis

- As previously mentioned that Comparison and Contrast Studies suggest that resources/ funds/grants/Govt/NGO/PRIORITIES suggest that our country is in need of such projects regarding poverty alleviation from the gross root level of man power and draft force of society. No doubt Brooke is performing very well in our society.
- As far as capacity building and a triangle establishment of a greater understanding and farmer (donkey / horse rearer to horse shoer to a Vet/Technical Staff) must be highly incentive based and appreciated in order to promote Good Farriery in link to a blacksmith to landlord level.

- In order to solve ego centric issues on bi lateral levels at both extremes (On Dr side & On Farmer Side).
- So in order to fill the communication gap, it is a need to let them realize that how a good shoeing has ever lasting and remarkable aftermath to sustain a profession cum business in long run, because there is a concept of Jadi-Pushti (passing from a race to race/generation to generation & lastly what is, how overall civilization is preserved and left for coming ones.

### Last but not least

- Leaving for future endeavours for prosperity and betterment of Both Nations.
- Leaving for Thought Provoking & Points to ponder.
- With a quotation from Prophet & King Solomon's tenure,
   Inferences in keywords,
- "When his army was coming in the Valley of Ants. An ant of female gender said to her sub-ordinates, "that go into your respective anthills, Prophet Solomon smiled and praised ALLAH.
- See Surah Namal in the Holy Qur'an.

### From



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