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NAVS NEWSLETTER

(Quarterly)

FOR PRIVATE CIRCULATION ONLY

NEW DELHI

Editor: Prof. Dr. R.N. Kohli

NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)

Office: G-4, A Block, NASC, Dev Prakash Shastri Marg, New Delhi-110 012

NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)
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NEW DELHI **NAVS NEWSLETTER** **JULY, 2016**

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1: N A V S (INDIA)'S INFORMATION & NEWS

NAVS' MISSION

"To consolidate and promote the views of scientific community on all policy matters related to Veterinary Science and Animal Husbandry in the welfare of India; to encourage better training and utilization of veterinary talent and enterprise in the country; to strive for advancement of livestock sector in the national economy; to promote animal welfare; to protect environment; and to safeguard the interests of the profession and to gain greater recognition and acclaim for it".

1.1: NAVS INFORMATION

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* Since deceased

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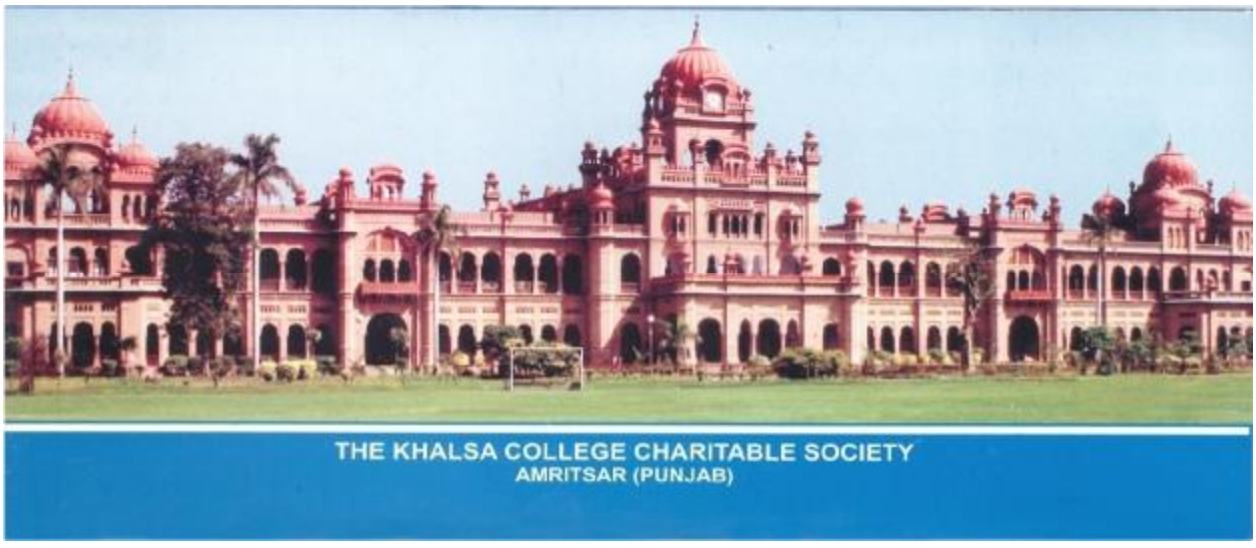
1. First NAVS Convocation: 18th December 1996 at Vigyan Bhawan, New Delhi
2. Second NAVS Convocation: 30th January 2000 at Pragati Maidan, New Delhi
3. Third NAVS Convocation: 16th April 2002 at IVRI, Izatnagar, U.P.
4. Fourth NAVS Convocation: 7th May 2005 at GBPUAT, Pantnagar, Uttrakhand
5. Fifth NAVS Convocation: 5th May 2006 at JNKVV, Jabalpur, M.P.
6. Sixth NAVS Convocation: 28th June 2007 at KVAFSU, Bangalore, Karnataka
7. Seventh NAVS Convocation: 16 May 2008 at SKUAST, Jammu, J & K
8. Eighth NAVS Convocation: 23rd January 2009 at SVVU, Tirupati, Andhra Pradesh
9. Ninth NAVS Convocation: 30th October 2010 at NDRI, Karnal, Haryana.
10. Tenth NAVS Convocation: 12th November 2011 at RAJUVAS, Bikaner, Rajasthan.
11. Eleventh NAVS Convocation: 2nd November 2012 at DUVASU, Mathura, U.P.
12. Twelfth NAVS Convocation: 28th January 2014 at LUVAS, Hisar, Haryana
13. Thirteenth NAVS Convocation: 28th February 2015 at CGKV, Durg, Chhatisgarh
14. Fourteenth NAVS Convocation: 4th November, 2015 at IVRI, Izatnagar, U.P.
15. Fifteenth NAVS Convocation: is likely to be held on 22 Oct. 2016 at Amritsar, Punjab.

1.2: NAVS NEWS

7.1: XV NAVS CONVOCATION - CUM - CONVENTION at AMRITSAR

National Academy of Veterinary Sciences (NAVS), India is organizing 15th Convocation and National Symposium on "Sustainable Livestock Development for Food and Nutritional Security" during 22nd-23rd October, 2016 at Khalsa College of Veterinary and Animal Sciences (KCVAS), Amritsar, Punjab. The main emphasis is on the potentially positive impact of sustainably intensifying food and nutritional security involving livestock.



Khalsa College of Veterinary and Animal Sciences (KCVAS), Amritsar established in 2010, a constituent institution of Khalsa College Charitable Society, is engaged in imparting quality veterinary education, developing entrepreneurial skills, providing scientific guidance and state of the art, clinical services to the livestock owners. The college has 86 highly qualified and dedicated faculty members. The college is mainly engaged in teaching, consultancy and technology transfer activity.

Organizing Secretary: Dr. Satish Jand <jandsatish@gmail.com>, Joint Organizing Secretary: Dr. S.K. Nagpal (M): +91-9779048400 Dr. S.S. Sidhu (M): +91-9915286361 Dr. N.A. Sudhan (M): +91-9419184209 Dr: Sajjad Hussain (M): +91- 9419080110

Registration Fee: Participants: Rs. 1500/- only Student: Rs. 500/- only Accompanying Person: Rs. 1000/- per head "Registration fee may be sent through crossed demand draft in favor of "Organizing Secretary, 15th Convocation and National Symposium on Sustainable Livestock Development for Food and Nutritional Security, payable at Amritsar."

Satish Jand <jandsatish@gmail.com>.

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2. EDITOR'S NOTE

Fame, Zoonosis and One Health Initiative

In our editorial essay titled '**Dog Lovers, Stray Dogs and the Society',** in the previous issue of this Newsletter (April, 2016), we took up the issues that arise from the co-habitation of dogs and human beings. We made there a mention of Rabies while stating that although, healthy animals conserved our physical and mental health, animals were also prone to acquire diseases that are not only fatal to them-selves but are also transmissible to human beings. These diseases, called **'ZOONOSIS'**, include many bacterial, viral, fungal and parasitic diseases. **Rabies** is one such fatal viral disease which is often transmitted to humans from dog bites. Though there are no exact global estimates of the incidence dog-bites, studies suggest that dog-bites account for tens of millions of injuries annually. India is a rabies endemic country with the highest incidence of rabies cases with approximately 30,000 deaths per year and more than 1,000,000 people undergoing anti rabies vaccination every year. Though the awareness level regarding rabies has increased thanks to TV and radio and a far higher percentage of cases are reported today than five years ago, there is still a need for awareness about Rabies and One Health.

Dr. Steve A. Berger, a physician trained in Infectious Diseases and Clinical Microbiology, and affiliated with the Tel Aviv Medical Center as Director of Geographic Medicine, has recently published 423 e-books (130,000 pages) which cover the status of Infectious Diseases in every country. In a post (entitled 'Fame and Zoonosis') submitted to **One Health Initiative** website on March 21, 2016, he has stated that though diseases acquired from animals had repeatedly shaped human history, the influence of zoonoses on well-known leaders in science, politics, war, religion, art, industry or even crime was not as well known. **The suffering or death of a world leader from plague, anthrax or rabies can serve as an important paradigm in the appreciation of One Health".** Dr. Berger has therefore explored the impact of zoonotic diseases on famous and infamous humans throughout history. Background data were derived from a "hobby" which he maintains at www.VIPatients.com, an interactive site in which users can explore the diseases of over 22,000 "VIP's"; or generate lists based on disease, profession or year of death. The specific "diagnoses" derived primarily from biographies, were regularly updated as additional information became available, to screen out the speculative or biased, entries. He has brought out that the first VIP to die of rabies was **Charles Lennox**, Duke of Richmond. He was appointed Governor General of North America in 1818, but died only one year later after contracting rabies from the bite of a fox in Quebec. In 1868, **Gieseppe Abbati**, an Italian painter from the Macchiaoli School, died of rabies after his pet dog bit him. Ironically, both Abbati and the dog had been memorialized in a portrait painted three years earlier. Six years later, **Ada Clare**, a little known American actress died of rabies following the bite of a dog. **Hayes St. Leger**, 4th Viscount Doneraile was an Irish peer who sat in the British House of Lords. In 1887, he developed rabies from the bite of a pet fox, and died as his house-servants smothered him to end his suffering. Actor, **Fernando Poe, Sr.** is a household name in the Philippines. Poe was injured while filming a movie in 1951, and died of rabies after allowing a dog to lick his wound. Thus, the disease does not require an overt animal bite for transmission. Ironically, the best-known encounter with rabies did not result in death. **In 1886, a Spanish child prodigy was bitten by a rabid dog. One year earlier, a Frenchman named Pasteur had developed a vaccine for the disease, and this boy became one of the first humans to be**

saved through vaccination. In 1891, young Pablo Casals went on to give his first cello recital, in Barcelona.

In our aforesaid editorial in the April issue of this Newsletter, we also discussed about the problem of stray dogs in our streets and dog bites leading to Rabies as a threat to public health as well as some other related Human - Animal Conflict issues. Animal-bites are a significant cause of morbidity and mortality worldwide. Dogs account for 76–94% of animal-bite injuries. Studies suggest that dog-bites cause tens of millions of injuries annually. Dog-bite fatality rates are higher in low- and middle-income countries than in high-income countries as rabies is a problem in many of these countries. With regard to methods adopted to control the canine population, all too often the authorities have turned to mass destruction in the hope of finding a quick solution. We, however, observed that, "we can not, and must not, allow murder of street dogs on India's streets" and suggested some of the humane solutions as it was absolutely imperative to strike a balance between human and animal rights." In this regard a strong case was made out for Animal Birth Control - Anti Rabies (ABC-AR) program. The courts also endorse Animal Birth Control (ABC) as the only scientific, humane, rational and lawful solution to controlling the stray dog population and eradicating the threat of rabies. The Supreme Court has put an end to the inhumane and indiscriminate killing of stray dogs across the country.

In this regard, we wish to reproduce below an extract of a news item entitled **"Zero-rabies city shows the way to small towns",** for our readers to see as to what dogged determination can do:

The incidence of the dreaded rabies disease, which has plagued India for years, has been virtually eradicated from the city of Chennai. According to the department of health, Chennai Corporation, no cases of rabies were reported in the last one year. "In the last three years, complaints of stray dogs have come down drastically" said corporation health officer Dr B Kuganantham, attributing it to better community care of street dogs. The number of deaths due to rabies had been decreasing steadily since 1996, when the corporation adopted the Animal Birth Control-Anti-Rabies (ABC-AR) programme. There were 120 deaths due to rabies reported in 1996. The number came down to five by mid-2000.

The ABC-AR programme consists of a process of sterilisation to control stray dog population and vaccination to prevent rabies. The success of the programme hinges upon the sterilisation of 70% of the dog population in a given area within one reproductive cycle, which is normally six months. According to the corporation, over 80% of the dogs in Chennai have been sterilised. The current dog to human ratio is pegged at 1: 40.

The overwhelming success of the programme in the city has led to its implementation in other parts of the state. Until now the programme was restricted to five corporations and 50 municipalities but the state level co-ordination committee, the first to be set up in the country early this June, decided to extend the programme to 561 smaller towns in Tamil Nadu. "When was the last time you saw a dozen puppies suckling its mother on a Chennai street? ABC is a humane approach to avoid killing of stray dogs in urban environs," said D Rajasekar, secretary, Animal Welfare Board of India (AWBI).

Animal welfare organisations like People for Animals (PfA), Blue Cross of India (BCI) and the Society for the Prevention of Cruelty to Animals have also played a major role in the success of the programme. The ABC program was first conceived by the Blue Cross in 1966. In 1964, an estimated 16,000 dogs were killed by the corporation, said BCI honorary secretary Saraswathi Haksan. The ABC programme was conceived as an alternative to this. The programme has found mention in the timeline of Environmental Milestones released

recently by Radford University, Virginia. The ABC programme, which has been endorsed by the WHO as a viable long-term solution to the stray dog problem, is being implemented in several parts of the country, including all the metros. As of 2007, India had an estimated 20,000 deaths due to rabies annually, the highest in the world, according to a survey done by the Rabies in Asia (RIA) Foundation. (http://timesofindia.indiatimes.com/Chennai/Zero-rabies-city-shows-the-way-to-small-towns/articleshow/4637380.cms).

Why Do Vets Criticise Each Other?

This following anonymous piece is not written by the NAVS Editor but is being shared from a social networking site for the possible general benefit of the veterinary fraternity.

I met an interesting Client today. He works for one of the top consultancies, and he felt that the biggest problem with Vets was that they were so insecure about themselves, that they often end up badmouthing each other. When he went to a Vet for treatment of his pet dog, and then to another one to get a second opinion, the first thing the second Vet did was to roundly criticise the treatment plan, the prescription and the tests which the first Vet advised.

He felt that vets seemed to take a lot of perverse pleasure in pulling each other down and perhaps they do this because they are not very confident about themselves. However, they don't realise the amount of harm they cause when they criticise other vets. For one thing, you shake the client's confidence in the first vet, but don't forget, when he loses confidence in one vet, he tends to lose confidence in all vets as well! It's a small world, and what goes around, comes around. If you badmouth one vet, it's quite likely he will hear about it sooner or later, and he's quite likely to repay you in the same coin by criticising your treatment approach, when some of your patients go to him for a second opinion.

I think Vets need to become smarter and to learn to stand up for each other. They need to understand that it's important that they be respectful of other vets, and this is a great way of bolstering the reputation of the entire Veterinary profession in society. Every time we criticise another vet, we actually end up harming ourselves as well.

This is not to say that vets should engage in a conspiracy of silence against patients , or keep quiet when they see a vet do something wrong . It simply means that we need to be a little more understanding, and appreciate that different vets could have a different perspective, and that your personal perspective is not always correct. Give the other vet the benefit of the doubt, so that when it's your turn to be at the receiving end, he will return the courtesy, and will not badmouth you to your patients.

We need to assume positive intent, and remind ourselves that all of us are trying to do the best for our patients! (Source: A post in **Veterinary Surgeon** on Face Book)

3. LETTERS TO THE EDITOR

NAVS Newsletter - April 2016: Once again, best congratulations in producing a NEWSLETTER that is full of information from all parts of the country.
Prof. Dr. Amreek Singh, Canada (**Amreek Singh <singh@upei.ca>**)

Thanks Prof. Dr. Kohli for a highly informative and educative Newsletter. I pray almighty God to give you a healthy long life to serve the veterinary profession. Regards
Prof. Dr. P.P. Gupta (Dr Prem Gupta <drpgupta41@gmail.com>**)**

Dear Sir: It is a very informative Newsletter with rich contents. I appreciate the hard work, dedication, and efforts on your part. My sincere appreciation to you is for the all out efforts in keeping the NAVS Newsletter going. Kind regards.
Dr. R.K. Singh Director/Vice Chancellor, Indian Veterinary Research Institute (Deemed University) Izatnagar-243 122, India Phone: +91-581-2300096 Fax-no. +91-581-2303284 email: directorivri@gmail.com; rks_virology@rediffmail.com;

Thanks Dr Kohli ji, NAVS News Letter is becoming more & more dynamic and informative. We all salute your work even at this age. Regards!
Prof Suresh S Honnappagol, Animal Husbandry Commissioner, Dept. of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, Government of India, Krishi Bhavan, New Delhi. Phones: Office: +9111 23384146; Fax - +9111 23382192; sskvafsu@yahoo.co.in

Respected Sir: Thanks for the April issue of NAVS Newsletter which has an excellent coverage of various aspects of the Veterinary Profession. I would like to inform you that I was elected as General Secretary of Society of Animal Physiologists of India during last annual convention.
Dr. P.S.P. Gupta, FNAVS, General Secretary, Society of Animal Physiologists of India, and Principal Scientist, ICAR-NIANP, Bangalore. E-mail: (<pspgupta@hotmail.com>)

Respected Prof. Dr. Kohli: Many thanks for sending a copy of April, 2016 issue of NAVS Newsletter. You are doing a wonderful job. I pray to God to bless you a happy, and healthy long life so that you continue as Editor -in-Chief of NAVS News Paper for many years.
Prof. Dr. Mahendra Pal, Addis Ababa University, College of Veterinary Medicine, Department of Microbiology, Immunology and Public Health, P.O.Box: 34, Debre Zeit, Ethiopia; <palmahendra2@gmail.com>

Thank you very much for mailing to me a copy of the January 2016 issue of NAVS Newsletter which is a well edited publication of the Academy under your editorial leadership. Accept my heartiest congratulations for it. As desired in the Newsletter, I am mailing my brief information for NAVS Handbook 2015 as attached file. **Dr. Baldev Gulati** E-mail: <brgulati@gmail.com>

Dear Dr Kohli: Thanks for the NAVS Newsletter. On a quick glance, I found a minor typographic error. In item (5.5) Dr Ashok Kumar's designation should read as ADG (Animal Health) instead of DDG (Animal Health). **Dr. Mahesh Chander,** Head, Division of Extension Education, ICAR- IVRI, Izatnagar. E-mail: <drmahesh.chander@gmail.com>

Dear Dr. Kohli: I wish to congratulate you on an in-depth and insightful editorial note on a subject of common interest (Dog lovers, stray dogs and the society, April 2016). Hailed as man's best friend, yet often maligned unfairly. Initially harnessed for assistance in hunting, dogs came to be valued, over time, for their numerous other benefits and services to mankind, which by far, outweigh the inconvenience and risk factors. At the same time, we can not generalize about pet or pedigreed dogs being all good, and their stray or mongrel version worthy of only condemnation. Several of the pet breeds are no more than "show pieces". Often the pampering lavished on them has made them lose their instinctive bark/bite. On the other hand, the stray dogs have perhaps been more sinned against than being sinners. You have rightly concluded that stray dog 'menace' can not be wished away, and with authorities like MCD extending only half-measures (if at all), we have to co-exist with the problem and, with public involvement, find our own solutions. The steps listed in "The Only Way Forward" are of great practical significance. Interestingly, right across your sector in Vasant Kunj, my sector & pocket is managing them on those very lines. The resident strays have been sterilized, vaccinated and collared. In their behaviour, they are a separate category (semi-domesticated) quite unlike the counterparts lazing around in parks and other public places. Each resident stray has marked its territory, in effect roughly one dog per block of 8 flats, and keeps intrusion by outside canines in check. More importantly, they provide invaluable aid to the colony's security guards in keeping vigil and deterring suspicious elements. Their periodic barks at night are re-assuring to the residents regarding safety concerns.
(2) It was very gracious of you to include a brief review of our book. For once, it was possible to note an omission and a couple of typographical errors in the Newsletter. In the Presidential piece, some part seems to be missing. Only goes to prove that you too are human & one-man army to boot. Thanks again & Regards,
Dr. M.B. Chhabra: manmohan chhabra<chhabra.manmohan@gmail.com>

Dear Dr Kohli: Thank you very much for the excellent issue of the NAVS newsletter. It is most educative. My apologies for not writing to you earlier, i.e. as soon as I saw it.
Dr. S. Chinny Krishna, Chairman Emeritus - Blue Cross of India; Vice Chairman - Animal Welfare Board of India. **E-mail:** **<drkrishna@aspick.com>**

Lovely news on veterinary sciences
Dr. GP Verma; E-mail: gyan verma <gyanp_7@yahoo.com>

Respected Sir: I have received the April 2016 issue the NAVS Newsletter and thank you so much for the regular publication of the Newsletter, the only document which brings information on regular basis. We all are grateful to you. Accept my regards and good wishes.
Dr. B.B. Verma; E-mail: Bipin Verma <bbverma@email.com>

Respected Dr. Kohli, thanks for mailing the April, 2016 issue of NAVS Newsletter. As usual, it contains a lot of information not only related to veterinary profession, but also on a number of other important aspects, like health tips. Your note highlighting different issues related to pet and stray dogs is indeed very informative.
Prof. V. D. Sharma, Dehradun. Email: (Vishwashwar Sharma<vdsharmadoon@gmail.com>)

4: FROM THE PRESIDENT'S DESK

Culling versus Conservation

Culling of weak, unthrifty, diseased or unproductive birds is an integral part of profitable poultry farming. Culling is also the standard means of eliminating old and unwanted other livestock. On the other hand, conservation and propagation of highly productive livestock is one of the priorities in animal husbandry. Culling also becomes a necessity in countries like India, where providing adequate nutrition for the productive animals has always been a major challenge. As applied to wildlife, normally conservation is regarded as an essential component of environmental rejuvenation and maintenance of biodiversity. When we talk of the threatened wildlife taxa, conservation becomes an even greater imperative. A fine example of community involvement in conservation efforts, is seen among' Bishnois' of Rajasthan for the native black buck.

Anthropogenic factors like human population expansion, mobility and deforestation with elimination / shrinkage of wildlife habitat, has resulted in increased interaction between wildlife and people. In most situations, man is the culprit and pays for it in terms of heightened conflict, such as with wild big cats. In recent times, instances of leopards straying into human settlements, have become more frequent. More recently, reports of the normally aloof Asiatic (Gir) lions turning man eaters, and necessitating their caging, have been carried in the Indian media. Such intrusions and encounters almost invariably end disastrously for the animal involved. As per conservationists, if such decimation continues unabated, the Indian leopard may be headed toward extinction, as happened to the Asiatic Cheetah not too long ago.

Wildlife often live in a fragile ecosystem which can support only limited numbers with a delicate balance between species. Human intervention in the form of culling is called for in situations when there is exponential population growth of a particular species at the cost of others. Culling of wild animals is also carried out if they pose danger to man. or when they start competing with livestock for food. Wildlife population census and culling is a regular feature in countries known for their wildlife wealth. In parts of Africa, elephants, wildebeest & zebra populations are kept at sustainable levels through periodic culling. An interesting example is that virus rabbit *Myxoma* (causal agent of myxamatosis, a disease with heavy mortality in rabbits) was introduced in 19th century in Australia to control the populations of European rabbit (*Oryctolagus*) which had bred enormously so as to be regarded a pest. Similarly, the Arabian camel introduced in the Great Australian Outback, rapidly multiplied and had to be exterminated. Australia's national animal & logo, the Kangaroo is also periodically subjected to culling via aerial shoots from flying helicopters.

In India, the rhesus monkeys have shifted from the wild to a semi-domestic mode and are regarded as pests, despite their mythological link to Lord Hanuman. Their culling is problematic, but is notified instates like Himachal Pradesh. In the category of agricultural pests, we have the peacock which being our national bird is sacrosanct, the wild elephant and the wild boar which destroy crops in the states of their abundance. A unique case is the"Nil gai"(*Boselaphus tragocamelus*), which has abandoned its wild state, invades crop lands thrives on foraging and wreaks havoc on the livelihood of farmers.

Because the name "gai" has religious connotation, their culling has hit a roadblock in Haryana, Rajasthan & some other states. Gujarat has recorded phenomenal increase in their numbers, from

41,644 in1995 to 186,770 in 2015 and wants it to be declared a 'vermin'. Culling of a limited number was authorized in Bihar recently following widespread ruin of crops and farmers' complaints. Killings the "Nil gai" (by hired sharpshooters) as carried out in Bihar is a short term solution. The problem requires a more lasting remedy with involvement of animal scientists. For a start, we can educate the public that the animal is anything but cow in nature, and a candidate for ranking as the farmers' enemy.

As a prologue to this note on man-animal conflict, I wish to recall a recent episode which illustrates how conservation can become a casualty in a situation of real or perceived threat from a captive animal. Footage of the Cincinnati zoo gorilla '*Harambe*', who was shot after a child fell into his enclosure, left some viewers convinced that he was trying to protect the boy by picking up and holding in his lap. Despite their bulk, immense power and general misconception that gorillas are savage and ferocious,'*Harambe'* was exceptionally gentle. Ironically, gorillas are a protected species and presently, only a few survive in the wild.

(Editor Adds: In the 'culling versus conservation debate' we may include the man's best friend - the dog - too. Millions of human hearts and homes are today being warmed by the faithful company of canine companions as pets. The role of dogs in guarding people's properties and the use of their intelligence by police detectives and crime investigators are well known. Research findings released by the American Heart Association as early as 1980 found that pet ownership may be a therapeutic tool for postoperative coronary heart disease patients, especially those who lead isolated lives. This has been confirmed in many subsequent studies. Although, healthy animals like dogs have been conserving the physical and mental human health since time immemorial, they are also prone to acquire diseases that are not only fatal to them-selves but are also transmissible to human beings.

The straying street dogs are a cause of the human-animal conflict as they not only create unhygienic conditions in the neighborhood leading to transmission and spread diseases to people, but their frequent nocturnal barking also disturbs the sleep of people and adversely affects their health. They are also a threat to the public health as Rabies, a fatal disease of dogs, is often transmitted to humans from dog bites. All too often, authorities confronted with the problems caused by these dogs have turned to mass destruction in the hope of finding a quick solution without realizing that it was almost a futile exercise. It is now becoming recognized that removal of surplus dogs cannot solve the problem unless combined with other measures such as registration and neutering of dogs and education of the public etc. The purpose of the Animal Birth Control-Anti Rabies (ABC-AR) programme is to bring down the number of street dogs in a humane manner and, more importantly, to bring down the number of cases of rabies. Chennai and Jaipur were the first cities to start sustained ABC-AR programmes. Chennai has had no human rabies from 2007 till 2010; down from 120 deaths in 1996. The Jaipur programme as reported in The Veterinary Record, September 16, 2006 reports a decline in the dog population by 28 per cent in the period 1992-2002 due to the ABC programme with a decline in human rabies cases to zero in the programme area but with an increase in other non-programme areas).

5: VET TRACKS

5-A: OBITUARY

5-A. 1: Dr. R. Pandey is no more

We are sorry and sad to learn of the tragic demise of Dr. R. Pandey, an eminent veterinary microbiologist (virology) and a distinguished founder fellow of the National Academy of Veterinary Sciences (India). He passed away on 21st April 2016 at Gurgaon, Haryana. He was also a fellow of National Academy of Agricultural Sciences and of the Indian Virology Society.

Dr. Ramayana Pandey was born on 10th July 1939 near Deoria in U.P. and studied there up to B.Sc. before his B.V.Sc.&A.H.(1957) and M.V.Sc. (1964) from Mathura Veterinary College and Ph. D. from H.A.U., Hisar (1969). He also did his post doctoral work in Texas, USA (1971-73). He was an Associate Professor of Virology at HAU, Hisar (1973-80) and a Professor of Infectious Diseases at Baghdad, Iraq (1981-83), before being a Professor & National Fellow at HAU, Hisar (1983-94) and ICAR National Fellow (1994- 2003). He won several awards & honors during his career, including the Rafi Ahmed Kidwai award. Dr. Pandey was not only a gem of a person with a very gentle nature, nice behavior, and a helping attitude towards all, but was also a very hard working dedicated scientist who was often regarded as a moving encyclopedia. The governing council of NAVS (I), in its meeting held on May 6, 2016, passed a condolence resolution on the demise of Late Dr. Pandey. On behalf of the NAVS fraternity, the Academy offers condolences to the bereaved family and prays that the soul of Dr. Pandey rests in peace.

5-A. 2: Dr. J.P Kukreti - A great Veterinary Centenarian is no more

"Dear Friends, with a heavy heart this is to inform that our beloved father, Dr. J.P Kukreti left for his heavenly abode today, 23rd May 2016 at Champaign, Illinois", says a note that his son Mr. Dinesh Kukreti posted on a social networking site.

The fascinating story of his life began in Goil, a small village of Garhwal district in Uttarakhand (India) on October 11, 1912, shifted to Dehradun where he completed his 12th Grade from D.A.V. College, and then got his B.Sc. degree in science and mathematics from Allahabad University in1934. He was one of the five persons selected for a 4 years advanced training course at Punjab Veterinary School, Lahore, in 1936-37 session to complete the LVP course in June 1940. He then joined the Veterinary Department of U.P. Government and worked in various Veterinary Hospitals up to 1948, when was selected to join the newly established Veterinary College at Mathura. During his stint as a teacher this College he also obtained his B.V.Sc. & A.H. degree. In 1960, he was selected (under TCM programme) for higher studies in Anatomy at the University of Illinois, Champaign, Urbana, Illinois, USA.

Dr Kukreti worked with Dr. St. Clair till 1962 for M.S. and D.V.M degrees and then came back to serve the Mathura Veterinary College. Upon his return to India in 1962, Dr Kukreti again taught Anatomy as an Assistant Professor and was Head of the Department of Anatomy and Histology till Dr M.B.L. Bhardwaj joined the Dept as Professor of Anatomy. In March 1968 Dr Kukreti took a bold decision to get an early retirement from U.P. Government to accept a temporary teaching job offered by Dr St. Clair. He joined the US University in August 1968 and was later confirmed there as Assistant Professor. He retired from the University of Illinois in 1986 at the age of 73 after serving for 18 years. He was permanently settled in USA and one of his daughters and three sons also migrated to USA, while one daughter is settled in Delhi. Dr Kukreti's beloved wife left for heaven on March 27, 2005. Dr Kukreti has travelled widely in India and abroad. At the age of 95, in 2007, he published his 'Memoirs', in which he has given the glimpses of his professional and personal life which reflect his unique all round personality, professional ethics, beliefs and faith.

Dr. Janarthan Prasad Kukreti just became a centenarian in 2012, when the National Academy of Veterinary Sciences (India) conferred upon him the Honorary Fellowship of the Academy in recognition of his illustrious and far reaching contributions in Veterinary Anatomy in particular and Veterinary Sciences in general in India and abroad. The ceremony was held at Mathura Veterinary College - his alma mater - where he was also a former faculty member. Dr Kukreti was a renowned educationist; soft spoken person of simple habits, integrity, gifted intelligence and diligence with pleasing manners. In his passing away, all his friends and relatives are left desolate and forlorn. The passing away of this pure soul is a stunning blow to all of them. Even at the ripe age of 104 his spirit, enthusiasm and zest for life was so powerful and infectious that only Gods could match it. He was one of the most elevating and inspiring personality of our age. People like Dr J P Kukreti always remain in the hearts of his near and dear ones forever. He has been described as an intrepid warrior gifted with a sharp intellect, who had risen to the status of a Saint through his Karma and yet a deeply humble and intensely human who positively influenced every one who came in contact with him. It was our great fortune and privilege to have come in contact with this true "Yugpurush"

We deeply mourn the passing away of Dr. Kukreti and join all the members of his vast extended family and friends in praying God to let his soul rest in peace.

5-B: Appointments, transfers, promotions, awards, honors and felicitations

5-B.1: Dr Juyal takes over as Vice- Chancellor, NDVSU

On 26th February' 2016, Prof (Dr) Prayag Dutt Juyal, a noted Veterinary Parasitologist, academician and administrator joined Nanaji Deshmukh Veterinary Science University (NDVSU), Jabalpur as Vice Chancellor.

Born in a tiny village of Uttarakhand on 5th January' 1955, after his family shifted to western UP, he completed his graduation from Meerut University, Meerut in 1973. Realizing his bent of mind, pursued Veterinary Science as career and got his B.V.Sc. & A.H. and M.V.Sc. (Veterinary Parasitology) from GBPUAT, Pantnagar in 1977 and 1979, respectively, and his Ph.D. from Chaudhary Charan Singh Haryana Agricultural University (CCSHAU), Hisar in 1987. He garnered a rich experience of over 35 years of academic, research management and administration while serving at the different universities viz GBPUAT, Pantnagar; RAU (Pusa), Bihar; CCSHAU, Hisar; Punjab

Agricultural University (PAU) and Guru Angad Dev Veterinary and Animal Sciences University (GADVASU), Ludhiana. He served GADVASU for about five years (2010-2015) first as Professor and Head of Department of Veterinary Parasitology and later as its Registrar. He also held the additional responsibility of Comptroller, GADVASU during the period. After superannuation about a year ago, he worked as Director (R & D), in PTU affiliated College.

Dr. Juyal won several awards and recognitions during his academic career e.g. Prof B V Rao Gold Medal (1998), Prof V S Alwar Memorial Award (2006) etc. and was elected as a Fellow of NAVS (India) in 2004-5. He is also a Fellow of IAAVP (2007) and NADSI (2014) apart from being associated with several other Societies, Committees and Academic Councils etc.

We heartily congratulate Dr. Juyal on his appointment and wish him the best at his new position.

5-B.2: Dr. Lal Krishna joins as Sr. Consultant (Livestock/Animal Science)

Dr. Lal Krishna, an eminent fellow and current treasurer of the Academy (since 2007) writes to inform that he has joined as Sr. Consultant (Livestock/Animal Science) in North Eastern Region-Biotechnology Programme Management Cell (NER-BPMC) of a programme of Deptt of Biotechnology, GOI on 1st April 2016. His office is located at A-258, S.B. House, Defence Colony, New Delhi - 110024. We extend our heartiest congratulations to him and hope that with his vast experience and hard working nature he will positively contribute a lot more to the profession in his new assignment

5-B.3: Prof. T.K. Gahlot Retires

Prof. T.K. Gahlot, Head, Department of Surgery and Radiology-CVAS, Bikaner, Director Clinics and PI, Centre of Disaster Management Technology for Animals, has superannuated on 31 December, 2015. As an active man like him can not stay idle for long, we wish him the best for his future engagements.

6. VIEW POINT

6.1: Hurdles in the Development of a More Effective Avian Influenza Vaccine: But there's light at the end of the tunnel

J. L. Vegad

Despite effective vaccines, avian influenza continues to be a major cause of mortality in poultry worldwide. Vaccination generally induces an effective but virus-subtype specific antibody response. As the virus continually evolves, new vaccines have to be administered when novel strains become dominant.

Avian influenza virus can exist in 144 different possible combinations. This is because they have 16 haemagglutinins (H) and 9 neuraminidases (N) projecting from their surface (16 x 9 = 144). Each virus has one H and one N antigen in any combination. Birds are susceptible to infection with viruses belonging to any of the 16 haemagglutinin subtypes. Most of the possible combinations have been isolated from the avian species.

FIRST HURDLE

A characteristic feature of avian influenza viruses is that they are dynamic and continuously evolving. The problem basically emerges from the instability of these viruses due to their constant mutations through antigenic drift. That is, they are not stable and keep changing, gradually developing into different forms. Influenza viruses change in two ways: antigenic drift and antigenic shift. Change through antigenic shift is rare, but the viruses keep changing by antigenic drift all the time.

Antigenic drift occurs in the genes of glycoprotein haemagglutinin and neuraminidase. Although antigenic drift produces only minor changes in the amino acid composition of these glycoproteins, it can give rise to new virus strains called "drift variants". Drift variants are viruses that have moved away (drifted) from their normal forms as a result of constant mutations and therefore are now different (variants).

As mentioned, avian influenza vaccines impart good immunity and protection. But the hurdle is protection occurs only when antigens in the vaccine virus and those of the challenge (field) strain are the same. That is, the same virus-subtype in both. This is because protection is virus-subtype specific. Birds are susceptible to infection with viruses belonging to any of the 16 haemagglutinin subtypes. Therefore, if the challenge virus strain is of a different subtype than antigens in the vaccine, protection does not occur. This means we need such a vaccine that is effective against all different subtypes of the virus. If this could be done then vaccination carried out only once in the lifetime of a bird will give complete protection against avian influenza.

But is this achievable?

SECOND HURDLE

Recently it has been reported that even after matching subtype of the vaccine virus with that of the challenge, vaccines fail to impart adequate protection. Studies carried out in several countries, particularly in China and South Korea, have revealed that after the use of properly matched vaccine there was rapid evolution in low pathogenic H9N2 avian influenza viruses. That is, rapid mutations occurred and the virus changed rapidly. The rapid evolution of avian influenza viruses following vaccination may possibly be because, in the tug of war between host and the pathogen, the challenge virus feels threatened for its survival from the pressure of vaccinal immunity and therefore changes rapidly. As a result, with the newly acquired proteins (antigens), the mutated virus (drift variant) easily escapes any damage from the antibodies produced against it earlier. The vaccine thus becomes ineffective against the mutated virus.

LIGHT AT THE END OF THE TUNNEL

Thus, there are two major hurdles in controlling avian influenza through vaccination. Firstly, no immunity will be imparted to the bird unless antigens of the vaccine virus and those of the challenge strain are the same. Secondly, even after matching the subtype of the vaccine virus with that of the challenge, vaccination fails to impart adequate protection due to rapid evolution of the virus.

This means if we have a vaccine that can take care of all the challenge strains (i.e. all 16 virus-subtypes), then it will be a much more effective vaccine. Moreover, it will be required only once in the lifetime of the bird.

But is this really possible? Research carried out recently on viruses of acquired immunodeficiency syndrome (AIDS) and human influenza has given a glimmer of hope. It is interesting that work carried out on these two viruses can have a bearing on the development of a more effective vaccine against avian influenza.

But how?

AIDS VIRUS

For more than two decades scientists have struggled to produce an effective vaccine against AIDS virus (human immunodeficiency virus, HIV), but have not succeeded. This is because HIV virus mutates so frequently that it has been extremely difficult to design vaccines that recognize enough forms of the virus to be effective. Interestingly, for the first time scientists have recently discovered in a patient evolution of a potent immune molecule that recognizes many different HIV viruses. They have called these molecules "broadly neutralizing antibodies or bNAbs."

By studying these molecules they believe it may be possible to make vaccines that elicit similar antibodies that can protect people from becoming infected with HIV. Over the past decade scientists have made a remarkable progress in examining broadly neutralizing antibodies, hoping to understand what gives these molecules their ability to bind to and recognize many different HIV viruses. But getting human cells to make broadly neutralizing antibodies has been more difficult than researchers expected, because they are unusually complicated and become effective against HIV long after the virus has established its infection in the body.

HUMAN INFLUENZA VIRUS

Flu vaccines trigger production of antibodies that attach to haemagglutinin, a glycoprotein on the surface of the virus that helps the virus in infecting cells. But the haemagglutinin mutates so rapidly that antibodies against one variant have limited power against another. Therefore, vaccine producers are forced to make a new vaccine each year.

Recently, scientists have found that "broadly neutralizing antibodies (bNAbs) to haemagglutinin are able to bind most variants, if not all". These antibodies have sparked a new idea about how to make a single vaccine that could prevent all strains of the virus. It was found that these broadly neutralizing antibodies generally target conserved functional region of the haemagglutinin (i.e. region that remains constant and does not change). In other words, unlike traditional antibodies against influenza virus which bind to the highly mutable head of the haemagglutinin, this one binds to more immutable amino acids in the highly conserved stem of the haemagglutinin. Therefore, scientists believe that a haemagglutinin molecule without head (headless) could be the basis of a new vaccine capable of triggering bNAbs that could protect against all strains of the human influenza virus. But creating a stem-only vaccine has presented formidable technical challenges. Removing the head is extremely difficult, if not impossible. Despite this, scientists have produced a stem-binding antibody that neutralizes every haemagglutinin subtype.

AVIAN INFLUENZA

Current work on AIDS virus, and in particular on the human influenza virus, has demonstrated that broadly neutralizing antibodies produced against only the stem of the haemagglutinin are able to bind most variants. It has been shown that bNAbs can protect against all 16 different H-subtypes of avian influenza virus. This has lead to the novel idea of producing stem-only vaccines.

However, the million dollar question is whether it would be possible to produce a stem-only vaccine effective against all the 16 haemagglutinins of avian influenza virus. Only the time will tell. This viewpoint at present appears very weird, but perhaps one day it may unfold into reality!

(Prof. Dr. J. L. Vegad, Adviser, Phoenix Group, Jabalpur, and Former Professor and Head, Department of Pathology, Veterinary College, Jabalpur. Email: <jawaharlalvegad@gmail.com>)

Gallibacterium anatis: An Emerging Pathogen of Poultry Birds and Domiciled Birds

https://www.researchgate.net/…/303027199_Gallibacterium_ana…

Gallibacterium anatis biovar Haemolytica caused devastating outbreaks in and around Bareilly area killing thousands of birds, in 2015, the disease was first suspected as New Castle Disease, but investigation revealed involvement of this less known pathogen in India. Though the bacterium is known since long as opportunistic pathogen of intensively reared poultry birds has emerged in last few years as multiple drug resistance pathogen causing heavy mortality outbreaks not only in poultry birds but also in other domiciled or domestic birds. Due to its fastidious nature, commensal status and with no pathgnomonic lesions in diseased birds G. anatis infection often remains obscure for diagnosis. Poor understanding of its epidemiology, virulence factors and pathogenesis work on development of effective vaccine obscured its importance; however, it is difficult to get rid of G. anatis infection on affected poultry farms. The present review summarises the current knowledge on G. anatis and its infections.

6.2: Need We Not Revamp Veterinary Service Delivery In Public Interest?

Rama Kumar V

Bird flu was an unprecedented disaster that hit Kerala. It was brought under control in record time with exemplary efficiency through the hard work of local vets. Co-operation of sister depts. and the central govt. was timely or else the outbreak that could have washed off the entire bird population. Bird flu put at risk thetraditional water based animal production system that provided both earning opportunity to the poor and nutrition security to Kerala community. Though the precise cost of the outbreak is yet to be assessed it involved compensation to 2,50,000 birds that had to be culled, medical expenses and expenditure on gadget for containment, loss of products, stored feed that had to be destroyed, market slump and protein shortage in subsequent months were huge. Animal Health hazards like Foot & Mouth disease (FMD), Anthrax, Swine fever, are regularly visiting Kerala and causing heavy loss. In some cases compensations are paid out of public funds. However, they were insufficient to cover the personal loss of profit to farmers and products to community. Most previous outbreaks were not of immediate threat to human health. Out-breaks demand steps to identify the **triggering reason** and the **preparedness** for future safety. This calls for a serious review of veterinary

service at various levels (cadres) involving their **'role identification and linkage within and without the dept's service system** *ie.* identification of the role of professionals and sister professionals at each level and their linkage with various routine and specialized services on a regular basis and to keep track of future hazards or disasters.

1. The general Veterinary service provided in Kerala at primary veterinary centers (PVC's called dispensaries or veterinary hospitals) include health care, animal related technology, clinical service and community development. Unreasonably fast urbanization exerted pressure on land and climatic uncertainties that resulted in stagnation in agriculture, especially in food crop production. Animals have assumed a greater role in empowerment to the marginal holders and landless through low input- low output animal rearing system. Wetland based food production like the raising clam, fish, duck & geese are opportunities that need more attention. Higher literacy and newer communication technologies (ICT, FM radios and print media) has brought, awareness about the role of health, environment, protein etc. in human health and wellness. Such opportunities have enhanced use of animal products, Man Animal proximity, interdependence and interaction. But a generalist Veterinary professional today cannot provide all the specialized services that are expected in ARD, unless specialist (cadre) veterinarians are available to support and compliment their primary service. Our present need for HIGHER training are specialist veterinary service, professional administration (planning conservation are part of this), education and research programs remain largely unsubscribed.

2. Before 1984 there were subject matter specialists in various specialties to support the primary veterinary service in Kerala. Veterinary professionals with higher training were appointed on a competence–cum-seniority basis. Polyclinics were established under a central govt. initiative to provide support to PVC's for special diagnosis and specialized treatment, infertility management. Professionals were regularly sent for a national diploma was offered by IVRI (Indian Veterinary research institute) to work as professional administrators and subject matter specialists. There is need for more positions for people with higher training in clinical subjects, public health, disease investigation, epidemiology, veterinary vaccine production, semen technology, feed technology, farm management etc.

3. But 1984 **special rules** notified by govt. (G.O.(P) No.204/84/AD. Dtd 17.07.1984) whereby the professional veterinary service was clubbed into IV categories with possibility of promotion/ transfer irrespective of competence or training need (departmental promotion, transfer etc.). With this the need for higher training or specific qualification for the posts in Animal husbandry gradually ceased to exist. Special rules were amended in 1986 through a mere executive order adding certain nominal changes in category I to III,. While fixing qualification for special rules, the provisions of section 30 of IVC Act, 1984* was ignored. Though the provisions of Indian Veterinary Council act 1984 was extended to Kerala through a resolution adopted by the Kerala assembly in 1991, and a number of circulars and reminders were sent from Veterinary Council of India it was never acted upon even when amendment of special rules (of 1986) were given statutory validity in 1993. All these erratic administrative actions relegated the role of professional support system and transparent governing to the rear. *[Indian veterinary council Act is an act to regulate veterinary practice*]

4. As per information obtained under RTI Act, the Animal husbandry department (AHD) provided a table enlisting the nature of job, purpose/objective of the posts (job) and informed that the qualifications required were as per the **special rules**. A plain reading of the table and special rules reveals total subjectivity and arbitrary administrative strategy.

5. As on today any person can be appointed to any position from Director to V*eterinary* surgeon (chief veterinary officer, surgical specialist, clinical pathologist, epidemiologist, physician, gynecologist or farm superintendent) irrespective of her/ his training or qualification and can be promoted or transferred anywhere in any post irrespective of the nature of training or qualification. For example, though there are more than 40 professionals with PG qualification of Veterinary public health (capable of handling disease transmissible from animals and their products to man) in the rolls of the dept. they are hardly used optimally for public service like forecasting and mitigating threats like bird flu, rabies or for safe food production through proper slaughter house management (abattoir).

6. Kerala can claim to provide service of a generalist veterinary surgeon to every panchayat. But, lack infrastructure, man power and HRD policy remains a major stumbling block for development of Animal Husbandry in the state. It is felt that unless the front line areas of training are addressed and infrastructure organized on priority, plans in the sector would remain an exercise of formality. There is no designated support system in Kerala for the optimal use of its rich professional resources. Professionals with training/ PG qualification in surgery are working in vaccine production units, in administration or in farms. District veterinary centers or polyclinics where public expects specialized treatment, diagnosis or surgery are often manned by persons with no specific qualifications in the subject matter.

7. The Veterinary council of India (a statutory body established to regulate veterinary practice in the country) identified four front line areas where Human resource development was immediately required. Acknowledging the widely varying demand for veterinary service and a support system, it had also prepared a regulation prescribing the minimum standards required for infrastructure, equipment and 'training needs' for an effective veterinary service delivery.

8. A manual of veterinary practice was updated in Kerala **after many decades** on the initiative of Local self-government veterinary Dept (LSGD) and state veterinary council. The duties and responsibilities of generalist veterinary practitioners were formulated [12+7 duties and responsibilities `were identified]. Norms of Primary veterinary centres, polyclinics and specialist veterinary service were also prescribed. But the manual does not seem to have seen the light of the day.

9. In 2006 in a national seminar entitled, "Merging modern science for sustainability, health and wellness: a vision for synergy in veterinary, medical, other sciences and technologies" following resolution was passed,-

"…….. it will be necessary to establish a department (or at least a section) of Veterinary Public Health in all the major Municipal Corporations and Municipalities with one lakh or more population in the first instance. To be cost effective and economically accountable to the public funds expended, such facilities can be and need be identified as associated institutions of R & D units of the state concerned. Medical / Veterinary / Agricultural universities can use the infrastructure of abattoirs, fodder farms, veterinary units, meat plants, animal bio-waste energy

production (biogas) units, solid waste disposal units, dog licensing/ stray dog control units for (hands on training) education and research. The bio-material, data and the staff can form part of "training-ware" for higher studies and research. Such units can also develop by-product units and product certification facility for export using public-private co-operation."

10. The Rajya Sabha Committee on Petitions for review of meat export policy submitted its exhaustive report on 13th February 2014 (Report No. 151), in which it made far reaching observations-cum-recommendations on various aspects of the issues under review. Following eye-opening excerpts from the report are relevant to the subject being discussed here:

*"The Committee **is distressed** to note that there are several Departments dealing with the issue of animal health i.e. the Department of Animal Husbandry, Animal Welfare Board, Ministry of Food Processing, Industries, Ministry of Health and Family Welfare, Dairying & Fisheries, Department of Environment & Forests and Ministry of Commerce resulting in total chaos.*

(**Dr. Rama Kumar V**, an eminent educationist, is the former secretary, Veterinary Council of India; Email: **<drramakumarv@gmail.com>)**

"KINDNESS IS THE LANGUAGE THE BLIND CAN SEE AND THE DEAF CAN HEAR."
-- MARK TWAIN

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"IT'S NOT WHAT YOU GATHER, BUT WHAT YOU SCATTER THAT TELLS WHAT KIND OF LIFE YOU HAVE LIVED".
-- GOLDA MEIR.

7. NATIONAL & INTERNATIONAL VETERINARY NEWS

7.1: Kamdhenu University bags Rs. 30 Lakh for e-Animal Health Card

National e-Governance Division (NeGD), Government of India, New Delhi, has initially sanctioned Rs. 30 Lakh to Kamdhenu University for e-Animal Health Card (e-AHC). Prof. M. C. Varshneya, Vice Chancellor of Kamdhenu University said that when he was Vice Chancellor at Anand Agricultural University, Anand a Soil Health Card was developed, wherein farmers were given their soil data and details of soil health and other useful recommendations on crops, fertilizer etc., online. On the same pattern, an online e-Animal Health Card is envisaged to improve animal productivity through maintaining e-AHC at village, taluka and district level. It will give unique identification to the livestock which will help to have systemic recording of data on production, reproduction and other. That helps to increase socio-economic status of the livestock farmers. NeGD has invited applications under Digital India Initiative for innovative ideas to be developed on e-Platform, where Kamdhenu University participated with other competitors and successfully got the project.

7.2: Indian Dairy Association News

7.2.1: Construction of Dr. P. Bhattacharya Memorial Hall Commences

The construction of Dr. P. Bhattacharya memorial hall formally commenced at the IDA headquarters in New Delhi on 7th May, 2016 after a simple ceremony seeking divine blessings. In a speech redolent with memories the IDA President Dr. N.R. Bhasin recalled his long association with the legendary geneticist and former President IDA, Dr. Bhattacharya, and expressed happiness that he could keep the promise he had made to Late Dr. Bhattacharya of constructing a state-of-the-art auditorium at IDA premises. Senior members of IDA expressed their thoughts on this momentous occasion and paid rich tributes to Dr. P. Bhattacharya. Reminiscences were shared by Dr. G.S. Rajorhia, Vice President-IDA; Dr. R.M. Acharya, former DDG(AS), ICAR; Dr. R.N. Kohli, Editor, NAVS (India); Dr. R.S. Khanna, Member-CEC-IDA and Chairman, Kwality Ltd.; Mr. M.P.S. Chadha, Member-CEC-IDA; Mr. K.L. Arora, Life Member, IDA; etc.

7.2.2: 16th World Milk Day Celebrated on June 1

As you are well aware the World Milk Day is celebrated every year on the first day of June. As in previous years, the Indian Dairy Association organized a meet at the IDA House, Sector-IV, R.K. Puram, New Delhi to celebrate the World Milk Day this year too.


The President Indian Dairy Association, Dr. N.R. Bhasin, extended his greetings to all on the occasion of the World Milk Day. Dr. A.K. Srivastava, Director and Vice Chancellor, NDRI provided a comprehensive overview of the dairy sector in India. In an analytical presentation, he highlighted the ongoing changes taking place in the sector and the various challenges it faces, especially that of adulteration. Dr. Kiran Singh, former Director, NDRI & D.G. (Animal Sciences) ICAR and Dr. R.N. Kohli, Life Member of IDA and Honorary Editor and former Secretary General, NAVS (India) were unanimous in their views that adulteration was a major concern hampering the growth of the Indian dairy industry. Speaking on adulteration, Dr. G.S. Rajorhia, Vice President-IDA informed that FSSAI was commissioning the National Milk Quality Survey 2016 to monitor levels of adulteration across the country. Recent surveys have indicated that the practice had gone down, both in terms of safety and quality. Adulteration with harmful substances was liable for strict punishment and imprisonment. Dr. Rakesh Mohan Joshi, Professor and Chairperson, Research and International Collaborations, Indian Institute of Foreign Trade, rightly said that the sector's focus should now be on exports and lamented that the country had not been able to make its presence in the global dairy market. Dr. G.K. Deb, Assistant Commissioner, Dairy Development, DADF, Ministry of Agriculture apprised participants with some important government dairy schemes. As a policy, the government was encouraging more women to enter the dairy fray, to join cooperatives or even become entrepreneurs. Further, 18 states had already been covered under the ambit of NDP-I which focuses, among other things, on breeding and nutrition development. Dr. B.S. Beniwal, General Manager, Delhi Milk Scheme was appreciative of the major strides Indian dairying had made in recent years and apprised the participants that Delhi Milk Scheme had earned a remarkable Rs. 55.3 crore in the just concluded fiscal year. Mr. Arun Patil, Chairman, IDA (West Zone) and Member-CEC attributed India's milk revolution to the ongoing technological and scientific interventions. Dr. R.S. Khanna, Chairman, Kwality Ltd. and Member-CEC, IDA said the need of the hour now was to not just increase productivity but also to reduce the cost of production. Several other eminent speakers at the occasion included the members of the Central Executive Committee of IDA who also spoke at the occasion included Dr. G.R. Patil, Dr. Satish Kulkarni, Dr. S.K. Kanawjia, Dr. K.S. Ramachandra, Dr. Raja Rathinam, Dr. J.V. Parekh, Mr. Parthibhai G. Bhatol, and Mr. M.P.S. Chadha and Mr. K.L. Arora, Life Member, IDA, among others.

7.3: LUVAS NEWS

7.3.1: World Veterinary Day Observed at LUVAS

Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar celebrated the "World Veterinary Day" on its campus on April 30, 2016. Several activities including a workshop on "Continuing Education with Focus on One Health", lectures, drawing and poster making competition and awareness lectures were organized in schools of Hisar. The day is celebrated on last Saturday of April every year all over the world. On this occasion a march for students and teachers was initiated by Vice-Chancellor, Maj. Gen (Dr.) Shri Kant from

Aravali Hostel and later gave away the prizes to the winners of different competitions. Mrs (Dr) Ranjana Sharma was Guest of Honour for this function. Functions were also organized earlier on 28th April. These included lectures by LUVAS' academic staff on the importance of veterinary profession and zoonotic diseases in the different schools of Hisar and a one-day workshop on the theme "Continuing Education with Focus on One Health" at the LUVAS campus in which veterinarians from Haryana's Animal Husbandry Department also participated. Dr. N.K. Mahajan, Dr. Ashok Kumar and Dr. Vijay Jadhav of LUVAS and Dr. Baldev Gulati, Principal Scientist, NRCE, Hisar, delivered lectures on these occasions. A drawing competition for school children and a poster making for university students were organized by the Dr. (Mrs) Nita Khanna, Director HRM, LUVAS, on 29th April.

7.3._: Regional Referral Veterinary Diagnostic and Extension Centre (RVDEC) to be established at Mahendragarh

LUVAS will establish its regional referral Centre and Extension Centre (RVDEC) at Village Riwasa in Mahendragarh District, the foundation stone of which was laid on April 09, 2016 by Honourable Chief Minister Sh. Manohar Lal in gracious presence of Sh. Ram Bilas Sharma, Honourable Education Minister, Sh. Om Prakash Dhankar, Honourable Agriculture, Animal Husbandry and Rural Development Minister, Sh. Dharamveer, Honourable MP, Bhiwani-Mahendragarh, Major General Dr. Shri Kant, SM, VSM (Retd.), Worthy Vice Chancellor, LUVAS, Dr Ravindra Sharma, Director Research and Dr N K Mahajan.

This station will have facilities for X-rays, Ultrasonography, surgical operations, clinical diagnosis, artificial insemination, investigation of diseases, analysis of feed/ feed ingredients. Sero-surveillance of the important diseases and compiling of epidemiological data will be a continuous process to create strong data base for disease forecasting and control strategies at this centre. Experts in the field of Veterinary Medicine, Surgery, Gynecology, Animal Production, Disease investigation, Extension Services etc will be available at this centre that will have modern equipment.

7.3._: Admissions to commence in Dairy Science and Technology College in 2016-17

Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) Hisar has established a new College of Dairy Science and Technology (CODST) at Hisar and admission of students is to commence in the academic session 2016-17This college, which will have 5 departments viz; Dairy Technology, Dairy Engineering, Dairy Chemistry, Dairy Microbiology and Dairy Business Management, will provide a 4-year B. Tech. (Dairy technology) degree programme under semester system. The basic qualification to enroll in a dairy technology programme is 10+2 with chemistry, physics and mathematics. Admission shall be made on the basis of merit through All India Entrance Examination conducted by the LUVAS. Total 30 students will be admitted - 26 students possessing Haryana Domicile and four from the merit list of ICAR-AIEEA-UG for the year 2016-17. The college will meet the increased projected demand of Dairy graduates by catering to the needs of the country in general and Haryana in particular by carrying out its teaching, research and extension education programmes.

7.3._: LUVAS Faculty Participated in Appreciation Course at Lok Sabha Secretariat

A team of four LUVAS delegates comprising of Dr. Harish Gulati, Dr. Deepika, Dr. Divya , Dr. Nilesh Sandhu participated in the 27th Appreciation Course in "Parliamentary Processes and Procedures' for Professors/ Associate Professors/ Assistant Professors of University/ Colleges from May 2 to 6, 2016 organized by Bureau of Parliamentary Studies and Training , Lok Sabha Secretariat, New Delhi.

The training was attended by 120 participants from 80 universities from all over India and LUVAS was the only Veterinary & Animal Science University which participated in the course. In this training participants were acquainted with the insight of parliament working procedures so as to enable them to help students to gain adequate knowledge about parliament & its functioning. The training was inaugurated by Honorable Union Minister of HRD, Smt. Smriti Irani and lectures were delivered by eminent parliamentarians such as Dr. Murli Manohar Joshi, Sh. Oscar Franandis, Sh. S.S. Ahluwalia, Sh. Prem Rai etc. during the course. Maj Gen (Dr.) Shri Kant Vice-Chancellor congratulated the teachers for successful completion of this course.

7.4: VCI to transform the Veterinary Medicine in India

Dr. Umesh Sharma, the President of Veterinary Council of India (VCI) has recently has posted the following messages on a social networking site.

- "Today Dr Sanjeev Balyan declared result of AIPVT 2016. Congratulations to all candidates who cleared the exam and best of luck for their career. Congratulations to VCI team for successfully conducting AIPVT 2016".
- "For last 2 years we are working towards bringing more awareness about Veterinary Medicine Profession. As a result there is an overwhelming increase in number of applications. In year 2014, there were 26221 applicants while in Year 2016 the number increased to 84012, an increase of approx. 400%. We are committed to transform Veterinary Medicine in India."

Reacting to these messages, Ajay Kumar Gahlot, Vice-Chancellor RAJUVAS, Bikaner, has appreciated the progressive steps of the VCI which have been well taken by the society. He informed that about 20% of the applicants were from Rajasthan and 50% of qualified lot for VCI quota is from Rajasthan. 'Rajasthan is the state which decided to take its own admissions from AIPVT list, and not to conduct RPVT, relieving students from burden of two exams.' he said.

Several other eminent Vets also appreciated the VCI's efforts and expressed their co-operation.

The VCI was earlier circulating a newsletter which was a source of "VCI News" to several publications including the NAVS Newsletter for their extended coverage to spread the news further.

7.5: NEWS IN BRIEF

7.5.1: Tackling Antimicrobial Resistance in Developing Countries: The Role of Aid and International Agencies

In a post on the above subject, the World Veterinary Association reports that Jim O'Neill, chair of the U.K. government-sponsored Review on AMR, and Lawrence Kerr, Director of Pandemics and Emerging Threats at the U.S. Department of Health and Human Services, told a gathering at the Center for Global Development in Washington, D.C. that in order to effectively fight the threat of antimicrobial resistance, countries across the world must come together in a global coalition to raise awareness of the issue, reduce antibiotic use, improve surveillance and develop new rapid diagnostics for resistant infections, amongst other strategies.

7.5.2: World Animal Vaccination Day launched

Health for Animals and the World Veterinary Association are pleased to launch the first annual World Animal Vaccination Day. Taking place on Wednesday 20 April 2016, World Animal Vaccination Day will raise awareness of the vital role vaccines play in protecting the health of animals and, as a result, people too.

http://www.worldvet.org/…/…/docs/wavd_2016_press_release.pdf

7.5.3: Veterinary World

Anjum Sherasiya of Veterinary World writes to us to inform that:

1. Veterinary World is accepted for inclusion in Emerging Sources Citation Index (ESCI) - part of Web of Science of Thomson Reuters. Indexing will be begin within few weeks.
2. Veterinary World is indexed in PubMed and PubMed Central.

7.5.4: WVD 2016 Celebrated

Dr NS Khinda, President, Punjab State Veterinary Council (PSVC) writes to inform that World Veterinary Day 2016 was celebrated at Dashmesh Auditorium GNDU by Punjab State Veterinary Council. A technical seminar on the topic of ONE HEALTH was held in which Dr Parveen Malik (Director NIAH), Dr MS Oberoi (GADVASU, FAO), Dr Paramjit Kaur (GADVASU), Dr Natasha and Dr Ralte (KCVAS) were the resource persons. Function was a huge success due to active participation of registered veterinary practitioners.

7.5.5: IAAVR Accepted as a Constituent Member of WVA

Dr. Rishendra Verma writes to inform that the Indian Association for Advancement of Veterinary Research (IAAVR) has been accepted as a Constituent Member of the World Veterinary Association (WVA). IAAVR was an Associate Member of WVA during 2004.

7.5.6: Gen B S Panwar's Book "The Silent K9 Warriors" Reviewed

In a review of Gen B S Panwar's Book "The Silent K9 Warriors" **Maj Gen RM Kharb**, AVSM (Retd), Former Head of Service, Remount Veterinary Corps and presently Chairman Animal Welfare Board, Govt. of India, has written to Gen. Panwar as under:

"Many thanks for mailing me a copy of your wonderful book "The Silent K9 Warriors". It is indeed an excellent book on working dogs covering every aspect in great details. I must complement and congratulate you and your publishers for designing a very neat and attractive book. I am sure the book will be a must read for all dog lovers besides it will be an great asset for all Army Officers and Commanders at all levels. This will create awareness about the invaluable contribution of our Army dogs in beefing up security of India. Great initiative well done"

7.5.7: Punjab wants to import 'better' Gir bull semen from Brazil

According to a report in The Indian Express (April 27, 2016) Punjab Government has a decided to import 'better' Gir bull semen from Brazil. This follows a 10-day tour by a six-member delegation, including two dairy farmers and Punjab officials to Brazil to study its indigenous cow breed 'Gir'. The government headed by Chief Minister Parkash Singh Badal has been focusing on improving and promoting indigenous breeds in Punjab. Some of the Punjab's dairy farmers, however, are critical of the decision and are opposing the move. "This is ridiculous. They are misleading the dairy farmers already trapped in debt," said Daljit Singh, president of Progressive Dairy Farmers Association. Speaking to The Indian Express, Dr H S Sandha, director animal husbandry Punjab, said, "We visited various dairy farms in Brazil and noticed that they had fewer animals but larger grazing areas. Their milk productivity of Gir cattle is double than ours. So, we have decided to import high quality Gir bulls semen from Brazil. We will be working on improving Gir breed here and propagating it among farmers."

8. SCIENCE, HEALTH & SOCIETY

8.1: New drug for prostate cancer found promising

Researchers, including one of Indian-origin, have created a new molecule for prostate cancer that has shown great efficacy when tested in mice. The findings suggest that the new therapeutic might be a viable treatment for prostate cancer in humans too if it is found effective in the future clinical trials. The treatment was designed to inhibit the activity of a protein called PAK-1, which contributes to the development of highly invasive prostate cancer cells. "PAK-1 is kind of like an on/off switch," said study co-author Somanath Shenoy, associate professor at University of Georgia College of Pharmacy in the US. "When it turns on, it makes cancerous cells turn into metastatic cells that spread throughout the body," Shenoy noted. The researchers developed a way to package and administer a small molecule called IPA-3, which limits the activity of PAK-1 proteins. The findings were published in the journal Nanomedicine: Nanotechnology, Biology and Medicine.

8.2: Cancer cases in India to multiply 5 times by 2025

Survival rates in India are quite low for most types of cancer, less than half of the advanced countries in many types. Researchers utilised data from the Million Death Study, a unique, nationally representative and longitudinal survey of over 14 million people, including a cohort of more than 27,000 pediatric deaths in India. Researchers say the low penetration of advanced treatment options in low and middle income countries like India is primarily because of underestimating the true incidence or mortality. Cancer is fast taking epidemic proportions in India. According to a Lancet report of 2014, slightly over 10 lakh new cases of cancer are diagnosed every year in the country. As per WHO's latest assessment, cancer cases in India will multiply five times over the next decade (by 2025). Increasing incidence and mortality from cancer is also leading to economic burden of treatment, which was 20 times the annual income of an average family, an assessment by AIIMS showed. Alarmed by the rising trend, the health ministry is working on an overarching National Multi-Sectoral Action Plan with the aim to reduce premature deaths from cancer, diabetes and heart diseases by 25% in the next 10 years.
However, successful implementation of the plan would require several measures, including improved lifestyle, healthy eating, anti-tobacco and anti-sugar measures, pollution control, early screening and detection, and infrastructure development.
(http://health.economictimes.indiatimes.com/news/industry/cancer-cases-in-india-to-multiply-5-times-by-2025/51963247)

8.3: The Ignored Natural Cancer Crusader

"It's outrageous that an ancient and proven cancer therapy as powerful as the aloe plant is still ignored by most American doctors. Aloe is a powerful cancer treatment that's used all over the world — but not in America, where it's applied only to soothe sunburn", states Dr. Al Sears, MD, CNS of USA. He is not surprised that mainstream medicine, Big Pharma and the FDA have refused to accept aloe's extraordinary medicinal qualities. You see, there's not much money in it. And it's hard to turn a profit on a plant you can grow in your own backyard. Not only has aloe been a medicinal powerhouse for more than 5,000 years, it's widely used today as a cancer fighter in Europe, South America, Africa and Asia. In Ayurvedic medicine, the oldest health care

system in the world, aloe is called Kumari, or "miracle herb." Following is an extract from a note by Dr. Al Sears:

"Aloe is used extensively by healers in Africa. And in Bali, where it's called *lidah buaya, or* "crocodile tongue," it's considered to be a potent immune-system booster and anti-cancer crusader. In Europe, the EMA — the European equivalent of the FDA — approved it years ago as an immune-system booster for AIDS patients and it's widely recommended there as a cancer therapy.[1] An aloe-based protocol is also widely used in Brazil and in many parts of Asia to treat cancer. Dozens of studies confirm aloe's anti-cancer benefits.[2] Compelling research from Japan shows that even in small concentrations, aloe can trigger *apoptosis* —cell death — in liver, brain and glandular cancer cells. And the study found that the higher the dosage, the more effective it is as a cancer fighter.[3] Another study from China revealed that one extract in particular, *Aloe-emodin,* is antiviral and can kill lung, liver and breast tumors.[5,6] You see, aloe contains three powerful immune-system boosters — *polypeptides,polysaccharides* and *acemannan.* Numerous studies show these help kill existing cancers and can also prevent them from forming in the first place. Aloe also contains a special kind of polysaccharide, called *acetylated mannose.* And studies show that acetylated mannose DOUBLES your number of T-cells within three weeks, and significantly boosts the power of your *natural killer (NK),* which seek out pathogens, like cancer, and destroy them.

Aloe has also been shown to minimize the damage to your body from chemo and radiation therapy. While chemo and radiation can be highly effective at killing cancer cells, they also wreak havoc on your immune system.[7] To be clear — I'm not talking about the typical green, gel-like aloe you use as after-sun — I'm talking about fresh aloe water or aloe juice straight from the leaves of the plant. You can find aloe water or juice online and at most health food stores. The best products contain at least 98% aloe and are cold processed using the whole leaf without *aloin* — the irritating chemical in aloe that can cause diarrhea. You should also avoid varieties that contain sugar and fruit juice, which diminish the nutritional value.

I often recommend my patients add it to my healthy *"Green Drink"* smoothie recipe:

¼-cup radicchio, 1 purple carrot, 1 cucumber, 1 lime, ¼-cup parsley, ½-cup Swiss chard, 1-cup spinach, ½-cup filtered water, ½-cup ice, 1 scoop (1.5 grams) of aloe powder

Blend together until smooth. You don't have to follow this recipe to the letter. You can make it to your taste. Just make sure to add aloe. I also recommend aloe as a supplement. Gel capsules are available online and at most health food stores. For the best immune-boosting results, take 300 mg twice daily. To Your Good Health,

1. Ahirwar K, Jain S. "Aloe-emodin novel anticancer Herbal Drug." ***International Journal of Phytomedicine*****. 2011;3, 27-31**
2. Karaca, K., et al., ***Int.J.Immunopharmacol.*****, vol 17, p. 183, 1995.**
3. Sukai, R., "Epidemiologic survey on lung cancer with respect to cigarette smoking and plant diet. Japanese ***Journal of Cancer Research*****." 1989. 513-520.**
4. Chen R, Wang S, Zhang J, Chen M, Wang Y. "Aloe-emodin loaded solid lipid nanoparticles: formulation design and in vitro anti-cancer study." Drug Deliv. 2014.
5. Du Plessis, L., Hamman, J. "In vitro evaluation of the cytotoxic and apoptogenic properties of Aloe whole leaf and gel materials." ***Drug Chem Toxicol*****. 2014.**
6. Sani, M., Goyal, P., Chaudhary, G. "Anti-tumor activity of Aloe vera against DMBA/croton induced skin papillomagenisis in Swiss albino mice." 2010. ***Journal of Environmental pathology, Toxicology and Oncology*****.**
7. Bałan, B., Niemcewiz, M., Kocik, J. et al. "Oral Administration of Aloe Vera Gel, Anti-Microbial and Anti-Inflammatory Herbal Remedy, Stimulates Cell-Mediated Immunity and Antibody Production in a Mouse Model." ***Central-EuropeanJournal of Immunology*****. 2014. 125–130.**

8.4: New anti-diabetic ayurvedic med can hit markets soon

New Delhi: A new anti-diabetic medicine made from five ayurvedic medicinal plants is likely to hit the market very soon. The Central Council of Research in Ayurvedic Sciences (CCRAS) has developed a new drug formulation AYUSH-82, which has proven clinically efficient in treatment

of diabetes, AYUSH minister Shripad Yesso Naik said. "The trials of the drug has shown significant reduction in blood sugar levels along with clinical improvements. No toxic effects were noted during the trial," Naik said in a written response to the Lok Sabha on Friday. The council has also initiated the process to commercialize the medicine and so far three leading drug makers, Dabur India, Kudos Laboratory India and La Granade Herbs and Pharma, have been given licences for its manufacture.

8.5: Can we delay ageing?

It appears that the elixir of life is near us. The telomeres and telomerase group at the Spanish National Cancer Research Centre (CNIO) has succeeded in creating mice in the laboratory with hyper-long telomeres and with reduced molecular ageing. Telomeres -- the protective structures located at the ends of chromosomes -- are essential to the stability of our genetic material and to maintain the "youthful state" of our cells and of our bodies. However, telomeres get shorter as we age. Once they reach a critical length, cells enter a state of senescence or die. This is one of the molecular causes of cellular ageing and of the emergence of ageing-related diseases.

Based on epigenetic changes, the new technique avoids the manipulation of genes in order to delay molecular ageing. The study also underlines the importance of this new strategy in generating embryonic stem cells and iPS cells with long telomeres for use in regenerative medicine. When telomeres are extra-long they exert a protective role against ageing and ageing-related diseases, thus significantly extending the lives of the mice. "The in vitro expansion of the embryonic stem cells results in the elongation of the telomeres up to twice their normal length," explained the authors in a paper described in the journal Nature Communications. The cells with hyper-long telomeres in these mice appear to be perfectly functional. When the tissues were analysed at various moments, these cells maintained the additional length scale, accumulated less DNA damage and had a greater capacity to repair any damage. In addition, the animals presented a lower tumour incidence than normal mice. The results show that pluripotent stem cells that carry hyper-long telomeres can give rise to organisms with telomeres that remain young at the molecular level for longer. According to the authors, this "proof of concept means that it is possible to generate adult tissue with longer telomeres in the absence of genetic modifications".

The next step is to "generate a new species of mice in which the telomeres of all the cells are twice as long as those in normal mice." IANS | 03 June 2016, 9:33 AM IST

8.6: Retirement Age for Government Doctors to be Raised to 65

To deal with the huge shortage of doctors, especially in rural areas, the government has raised the retirement age of non-teaching and public health specialists and general duty medical officers to 65 years. It will be a win-win for all. "It's difficult to make doctors in two years but poor families cannot be forced to live without them. Therefore...I want to tell my countrymen that this week our Cabinet will raise the retirement age for doctors to 65, instead of 60 or 62 in some states", Prime Minister Narendra Modi said at a political rally in Uttar Pradesh. Vacancies in remote areas: Currently, in the Central Health Service, there are 22 vacancies of a sanctioned strength of 104 public health officials with 5 officials set to retire next year. In the non-teaching officers' category, there are as many as 131 vacancies of a sanctioned strength of 598; 22 of these officers are set to retire next year. The category of general duty medical officers has 645 vacancies of a sanctioned strength of 2,198 with 131 set to retire next year. dministrators say it's the unwillingness of specialists to go to places like Lakshadweep, the Andaman &

Nicobar Islands and other similar remote areas that is the cause for such large numbers of vacancies.

Now, govt. service will be attractive: By raising the retirement age to 65 from 62 - for non-teaching and public health officials - there will be no retirees during the next three years. In addition, administrators say the posts will become more attractive to the new doctors while filling vacancies through direct recruitment. The ongoing programmes also need to be sustained by continuous and intensive monitoring, which requires additional manpower and also the retention of existing experienced public health specialists.

Retaining professionals for public sector: The general duty medical officers assist specialists and those with a post graduate qualification actually supplement the chronic shortage of specialists. The members of this sub-cadre are engaged in almost all the activities of the Ministry of Health and Family welfare. The members of this sub-cadre currently retire at 60. Because of that, the government is losing experienced professionals to the private sector and other international agencies. Raising the retirement age for this category to 65 will help retain a big pool for another five years, as the government tries to build this cadre from the bottom up. (http://health.economictimes.indiatimes.com/news/industry/raising-retirement-age-for-government-doctors-to-65-will-be-win-win-for-all/52478549)

8.7: Dentist surplus forces freeze on new colleges in India

Unemployment has entered the health sciences sector. With supply outstripping demand and no work for new dental graduates, India has decided to not have any new dental colleges. The decision was taken recently at the general body meeting of the Dental Council of India (DCI), which grants permission to new institutes. The decision follows requests from several existing colleges that the council reject fresh proposals for more institutes, as well as the high rate of unemployment among dentists. India currently has 309 dental colleges, which churn out around 26,000 dentists every year. The count was as high as 30,570 in 2010. In 1970, only 8,000 dental students had graduated. "It would be a good idea to consolidate our numbers now and strengthen the existing institutes," said Dr Mansing Pawar, DCI member and dean of Government Dental College. An exception could be made for states like those in the north-east that do not have any dental college, he added. Some estimates suggest that India has 3 lakh dentists, but there is an imbalance in their spread. In 2004, India had one dentist per 10,000 people in urban areas and one dentist per 2.5 lakh people in rural areas. It was not long ago that the good times were rolling for dentists. It is now, however, estimated that there will be a surplus of more than 1 lakh dentists in India by 2020. The DCI, on its part, has been trying to trim the growth for some time now. In the last two years, it has only permitted new colleges with an attached medical institute to foray into the dental stream. But that was not enough. "Mushrooming of dental colleges in the past few years in India has led to unemployment among Indian dentists. Thousands of dentists are coming out every year with very low prospects of jobs," noted Namrata Dagli in her paper 'Increasing unemployment among Indian dental graduates'.

Former acting DCI president Dr Mahesh Verma, who is the current director of Maulana Azad Dental College, said the time had come to "not vitiate the problem and build on what we have". "Over the years, we have created a huge manpower of dentists and job avenues have shrunk. There is not much opportunity for today's passouts, except if they want to start their own practice, which too isn't easy. It needs money, space, infrastructure and the right attitude," he added. "Self-practice in urban areas is not very easy due to saturation of the dental market. In rural areas, private clinics are not viable because of low awareness of oral health among the rural

population," Dagli added in her paper, which was published in the 'Journal of International Oral Health'. "Dental graduates are facing serious financial constraints. Unemployed dentists are left with no choice but to quit... and work in call centres or commit suicide," she said in the paper.

8.8: By 2017, docs, hospitals to give up using Red Cross emblem

By 2017, doctors, hospitals and pharmacies in India will have to stop using the signature dark-coloured red 'plus' sign (cross) emblem on their vehicles, ambulances and establishments since the logo, which has been in use for long, is patented for International Committee of Red Cross (ICRC) and is protected under the Geneva Convention of 1949, to which India is a signatory. The existing logo is likely to be replaced by a cross in a lighter shade of red and will have either 'Dr' or 'Rx' written on it, to make it different from the Red Cross Society logo. A decision to this effect was taken by the India Medical Association (IMA) in Agra on April 3 at a meeting of its central working committee and these two logos were shortlisted from over 100 designs. "Once finalised, only doctors practising modern medicine will be allowed to use these logos," said IMA general secretary Dr K K Aggarwal.

8.9: Britain to hire 400 doctors from Indian chain

Hundreds of general practitioners (GPs) are being recruited from India to help fill the growing demand-supply gap in general practice and meet a UK government pledge to add 5,000 doctors by 2020. Health Education England, the non-departmental body of the Department of Health responsible for NHS training, has signed a "memorandum of understanding" with a major hospital chain in India.

The deal with Apollo Hospitals will involve the transfer of up to 400 GPs to England but HEE said that the details "are still under discussion" according to Pulse, the primary care magazine. The Chennai-based hospital chain --Apollo Hospitals -- which employs more than 40,000 people and has a 500m turnover, and which offers a diploma in family medicine that is accredited by the Royal College of General Practitioners, said it signed the memorandum as a "starting point" to explore how both countries can benefit from "the mutual exchange of ideas and clinical staff in improving the education and training of healthcare staff" and patient care. "These are initial discussions but we look forward to announcing the outcomes of this work over the coming months and years as it progresses."

(Source: Paul Gallagher | The Independent | 10 April 2016, 12:16 PM IST)

8.10: Polio will be wiped out by 2017: Gates

Bill Gates said on 13th April that "with any luck" polio will be eradicated by 2017 in the last two countries where it remains active, Pakistan and Afghanistan.

The Microsoft founder announced a $50 million donation from Qatar to "The Lives and Livelihood Fund", a partnership fund between the Bill and Melinda Gates Foundation and the Islamic Development Bank, which together have been working to try to eradicate diseases, including polio, since 2012. "There's very few cases left, just two countries at this point, Pakistan and Afghanistan, and with any luck either this year or next year we will have the last cases of those," Gates said.Pakistan has already made it an official target to rid the country of polio - an infectious viral disease resulting in muscle damage - in 2016 though there have already been eight recorded cases so far this year. Although these are the two countries where the disease remains endemic, the Global Polio Eradication Initiative says eight countries are"vulnerable" to the virus, including Cameroon, South Sudan and Syria.

The billionaire had, earlier this year, announced the launch of a $4 billion fund to help eradicate malaria. The donation received in Doha will go towards a fund seeking to provide affordable financing for the 30 least-wealthy countries among IDB members. It aims to ease the burden for some of the world's poorest people through grants and Sharia-compliant loans. "This is a great milestone for helping the poorest," he said. In total, the fund is trying to raise $2.5 billion.

8.11: Prime Minister Urged to Revamp Medical Council of India

New Delhi: Charging that Medical Council of India (MCI) has lost its "credibility and moral standing", former health secretaries and doctors have urged Prime Minister Narendra Modi to revamp it to ensure that hospital chains and owners of medical colleges, having "deep conflicts of interest", do not enter this body. In a letter to the Prime Minister, the former members of MCI, health secretaries and prominent doctors, also urged Modi to revamp the curricula for graduate and post-graduate medical education. "We request that the implementation of the recommendations is taken up without delay, namely replacing the elected council with medical and non-medical persons to be selected by an expert body in a transparent manner, in order to ensure that hospital chains and owners of medical colleges, having deep conflicts of interest, do not enter this body and subvert it once again for their personal gain."Revamp the curricula for graduate and post-graduate education, separate the three functions of regulation, education and accreditation with eminent individuals known for their professional and personal integrity and the institution of a national entrance and exit examination so as to ensure better quality of the doctors being produced," the letter said.

Among those who have signed the letter are former health secretaries Javid Choudhury, Prasanna Hota, Sujatha Rao, Chandramouli and Keshav Desiraju and MK Bhan, former secretary of the Department of Biotechnology, and Gautam Sen and Sita Naik (former members of the Board of Governors of MCI), Srinath Reddy, President of the Public Health Foundation of India, and Samiran Nundi of Gangaram Hospital. **(Source:** PTI | 14 April 2016, 7:31 AM IST **)**

8.12: Heart disease, cholesterol not linked?

Prescriptions for the cholesterol-reducing drugs statins are a waste of time, a group of experts have said in controversial new research which claims cholesterol does not cause heart disease in the elderly. An international team of scientists reviewed 19 previous studies, involving 68,000 people, and said they found no link between high levels of LDL cholesterol, the so-called "bad cholesterol", and heart disease in the over-60s. The study found that 92% of people over 60-years-old with high cholesterol lived as long as, or longer than those with low cholesterol levels. In the remaining 8%, no association was found. Statins have long been prescribed as a means of reducing the risk of heart attacks and strokes caused by atherosclerosis. The authors have called for a reevaluation of statin prescriptions, saying "the benefits from statin treatment have been exaggerated". But the team claims its research indicates high levels of cholesterol may even be beneficial in preventing other illnesses. High cholesterol, the team writes, "binds to and inactivates a broad range of microorganisms and their toxic products", protecting people from some diseases. The researchers claim high cholesterol levels "may protect against cancer", as studies following 140,000 people for between 10 and 30 years found lower levels of cancer in those whose total cholesterol levels were higher. They also cite research in which rodents given cholesterol lowering drugs developed cancers. The research has prompted fierce criticism from

academics, who have questioned the research methods and bias of the authors. Professor Jeremy Pearson, associate medical director at the British Heart Foundation, said the findings were "not surprising because, as we get older, many more factors determine our overall health, making the impact of high cholesterol levels less easy to detect". (The independent)

8.13: 20 per cent Indian youth suffer from hypertension

Over 20 per cent of Indian youth suffer from hypertension problems due to their sedentary lifestyle, experts have said. The experts warned that hypertension and other complications were also leading to brain haemorrhage. "Most of the young working population face health problems due to anxiety, stress and the usual 'hurry' that prevails in their day-to-day life," said A. Muruganathan, President of the Hypertension Society of India. "Changed lifestyle, attitude, behaviour, erratic food habits, smoking, alcohol consumption and pollution lead to lifestyle diseases such as hypertension." According to Muruganathan, abdomen obesity was another major cause of hypertension. "Males with waist circumference of more than 90 cm and females with waist circumference of more than 80 cm have more chances of developing hypertension," he said. Hypertension is a major cause of cardiovascular problems in India which leads to 1.1 million deaths (uncertainty index 0.9-1.3 million) annually. It accounts for 10.8 per cent of all deaths in the country.

Working youth hardly get time to exercise and to have proper diet which leads to hypertension. Diabetes is a common disease among youth in 20s and 30s age group. A sedentary lifestyle only exacerbates the situation, S.S. Das, head of critical care and cardiology at the Kolkata-based Mercy Hospital, told IANS.Asked if other countries were also witnessing these problems, Das said the scenario was same globally. He said the medical care facilities were much organised and focused in the West and countries like China. Therefore, they were easily able to tackle the problem. He said many indulged in self-medication, leading to other problems including thickening of blood vessels and kidney ailments. "To efficiently tackle diseases like hypertension we need to move from curative to preventive care. Regular health check-ups, reduction of salt, sugar intake, promoting physical activity, early detection and treatment are some of the possible ways to have a preventive approach towards such diseases," said Kenneth Thorpe, Chairman, Partnership to Fight Chronic Disease.According to Thorpe, over 20 crore people are on the verge of stepping into the dangerous zone of hypertension.

8.14: Diabetes drug could cure Alzheimer's disease: Study

London: Alzheimer's Disease and Type-2 diabetes are so closely related that drugs currently used to control glucose levels in diabetes may also alleviate the symptoms and progression of the most common form of dementia, says a pioneering new study. "This study provides a new therapeutic angle into Alzheimer's disease and we now think that some of the compounds that are used for obesity and diabetic deregulation might potentially be beneficial for Alzheimer's patients as well," said lead researcher Bettina Platt, Professor at the University of Aberdeen in Scotland. The study was published in Diabetologia, the journal of the European Association for the Study of Diabetes.

This is also the first study of its kind to show that Alzheimer's disease can lead to diabetes, as opposed to diabetes occurring first as was previously thought. Dementia-related complications within the brain can also lead to changes in glucose handling and ultimately diabetes, the findings showed. "Until now, we always assumed

that obese people get type 2 diabetes and then are more likely to get dementia -- we now show that actually it also works the other way around," Platt noted.The researchers were keen to investigate why the two diseases are so commonly found together in elderly patients.

The researchers developed a model of Alzheimer's disease and were surprised to find that increased levels of a gene involved in the production of toxic proteins in the brain not only led to Alzheimer's -like symptoms, but also to the development of diabetic complications.

"It was previously believed that diabetes starts in the periphery, i.e. the pancreas and liver, often due to consumption of an unhealthy diet, but here we show that dysregulation in the brain can equally lead to development of very severe diabetes," she explained. The findings suggest that diabetes does not necessarily have to start with your body getting fat -- it can start with changes in the brain.

"Many people are unaware of the relationship between diabetes and Alzheimer's disease, but the fact is that around 80 per cent of people with Alzheimer's disease also have some form of diabetes or disturbed glucose metabolism. This is hugely relevant as Alzheimer's is in the vast majority of cases not inherited, and lifestyle factors and comorbidities must therefore be to blame," Platt pointed out.

"The good news is that there are a number of new drugs available right now which we are testing to see if they would reverse both Alzheimer's and diabetes symptoms. We will also be able to study whether new treatments developed for Alzheimer's can improve both, the diabetic and cognitive symptoms," she said. (.IANS | 22 June 2016, 4:28 PM IST)

8.15: NEWS WITHOUT CAPTION

9. FORTHCOMING EVENTS

Calendar of Conferences, Conventions and Symposia in India and abroad

Get your event listed in this section by mailing complete details to the Editor: rnkohli@gmail.com

10.1: National Conference on Zoonotic Disease Control - 6 July 2016 - AIIMS, New Delhi

The Millennium India Education Foundation (MIEF) is organizing the 8th annual national conference on Scientific Update on Zoonotic Disease Control jointly with Division of Clinical Microbiology and Molecular Medicine, at Dr Ramalingamswami Board Room, All India Medical Institute of Medical Sciences (AIIMS), New Delhi on 6 July 2016 (8.30am-3pm). For any additional information/ query contact: Dr Uday Kakroo email (drkakroo@gmail.com) / whats app (9810301261) or browse their website www.mief.in.

10.2: Therio Conference & Symposia - Jul. 27-30, 2016 - North Carolina, USA

Each year the Society for Theriogenology and the American College of Theriogenologists meet at the annual Therio Conference for cutting-edge CE sessions, abstract presentations, seminars, symposia and networking opportunities in addition to fun events. Created to provide CE opportunities for veterinarians interested in the specialty of animal reproduction, courses include small animal, production animal and equine tracks. (**IVIS News** <news@ivis-news.org>).

10.3: 3rd International Veterinary Congress August 18-20, 2016 London, UK

DETAILS: **http://www.conferenceseries.com/veterinary-meetings**

10.4: 5th Animal Health and Veterinary Medicine Congress September 26-28, 2016 Valencia, Spain. DETAILS: **http://www.conferenceseries.com/veterinary-meetings**

10.5: World Veterinary Association Announces 2nd One Health Conference

2nd GLOBAL CONFERENCE ON ONE HEALTH to take place in Japan on 10 and 11th November 2016. Moving forward from One Health Concept to One Health Approach (see further details on the next page).

10.6: 6th Global Veterinary Summit November 14-16, 2016 Atlanta, USA

DETAILS: **http://www.conferenceseries.com/veterinary-meetings**nd

10.7: International Veterinary Information Services (ISVS) Announces Distance Education [DE] Calendar for 2016

Many distance education (DE) courses are open for enrolment at the Centre for Veterinary Education (CVE) in Sydney, Australia, for 2016. DE programs are mentored by leading veterinary experts who provide individual feedback and advice on completion of each module.

The Centre for Veterinary Education is committed to providing quality practical and applied professional development to Veterinarians for over 50 years and we have used our knowledge and expertise to offer superior distance education programs, allowing you to become the best vet you can be. http://www.ivis.org/newsletter/archives/jun15/jun1215cve.htm

10.8: 33rd World Veterinary Congress 27 to 31 August 2017, Incheon, Republic of Korea. Details: info@wvc2017korea.com.

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