## SPECIAL ARTICLE

## VENEREAL DISEASES IN RELATION TO THE NATIONAL EMERGENCY\*

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## Ladies and Gentlemen,

I have not participated in person in human wars; hence I cannot speak of venereal diseases in relation to wars with authority, though for nearly a quarter of a century I have been battling with agents of venereal diseases affecting the civilian population. I distinctly remember how at the start of the Second Great War, Sir George McRobert, Kt, I.M.S., M.D., F.R.C.P., D.T.M. & H., the then Superintendent of the Govt, General Hospital and Professor of Medicine, advised me to join the Defence Services, for he had said then, "I would like to see you in affluent circumstances". I remained at my post, "stay put".

It was a trying period when many of my colleagues, house surgeons and even students had left Madras; nevertheless V. D. war went on with a skeleton staff! War against V. D. is still on. "Wars are not declared", they say, "Wars simply happen". What should we know about V.D. in the current context? Venereologists of old cannot hold any more unless they gear themselves to the latest level of thinking regarding venereal diseases.

I have heard it said that in a recent theatre of war, elsewhere in the world, venereal diseases have been rife. It has been told that people suffering from venereal diseases appeared without any compunction on their part before the V. D. medical officer in charge, got themselves examined and adequately treated, whether they were high ranking officers or belonged to the low rungs of the ladder, demonstrating the frankness with which medical relief is sought for a venereal ill. I maintain that attitude towards venereal diseases of anyone, military or civilian, should be as that for any other sickness, shorn of feelings of shame and disgrace.

What usually happens with civilians on the contrary is that they do consult somebody for their several complaints; only when stricken with venereal diseases, they seek the assistance of quacks or suffer in silence till after they have passed the early easily treatable phase of the communicable venereal diseases. We, who are gathered here, must create the necessary public opinion that venereal diseases

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are Just diseases first and diseases last and it is becoming of any one to claim the right to have immediate attention. This approach will be first prerequiste on the part of the public and the medical practitioners towards a successful campaign against venereal diseases Just now.

I also learn that today the pattern of venereal diseases, on the battle front, has become altered. Syphilis today is not so much the bugbear of the defence forces, as it was the one single disease that baffled the nations at war in the late Great Wars. A casual review of records of different military medical stations of II Great War reveals that in one such institution then there were 25,000 cases of syphilis under treatment at one time and if you look back in retrospect, you will be bewildered at the magnitude of the problem of management of syphilis then. Masses of numan beings were confined for long periods of time, as the desultory treatment procedures then in vogue stood in the way of one's speedy return to duty on the battle front. The teatment for syphilis with arsenic, bismuth and iodides indeed stretched over periods lasting longer than 40 weeks.

Added to this long drawn out therapeutic struggle, it happened that when an arsenie injection was given, there were some minor or even major reactions that really were hazardous, terminating at times in fatalities. Who has forgotten post arsenical encephalitis, dermatitis, jaundice, or blood dyscrasias? Fortunately today the old prolonged metallochemotherapy, with its attendant risks referred to, has been abandoned. A simpler, safer, and surer treatment schedule of a very short duration, absolutely free from toxicity has been evolved in penicillinotherapy of syphilis. The management of syphilis is no more problematic.

It is not at all the therapy today but the diagnosis of syphilis that baffles the specialist. Long before penicillin could be administered to a person suffering from syphilis, it very often happens that the patient has already been under its influence in subcurative does, taken for some other reason; and this continual seepage of the human body with penicillin, does not permit syphilis to show off its real nature. A syphilitic ulcar under these circumstances is dark-field negative. The serological test for syphilis is negative or exhibits a low titre. The secondary phase inclusive of rash is generally suppressed and the syphilitic infection is temporarily submerged below the clinical horizon.

It has been noted further that the ratio of the different categories of eveneral diseases encountered in the battlefront of today is as I case of syphilis to 5 of gonorrhoea and 30 of nongonococcal genital discharges.

Next to syphilis, Gonorrhoea claims our attention. Here I would voice a note of caution. Today all that flows is not gonorrhoea, as was wont to be considered in the past. All the smears stained with methylene blue and found to exhibit intraleucocytic diplococci are not Neisseriae Gonorrhoeae. Even if it be that these smears are restrained by the Gram's technique, the Gram negative intra-leucocytic diplococci cannot be all gonococci. Banal organisms under the

influence of antibiotics may much resemble gonococci, and Gram stain technique is now judged by WHO Experts to be primitive? The recently innovated fluorescent antibody technique is an impressive procedure, justifiably suggestive of presence of gonococci but cultural proof of gonococcal infection becomes a desideratum to be further confirmed by the oxidase test and sugar reactions. Yet, despite the emergence of penicillin resistant strains of gonococci outside India gonorrhoea is treatable and is free from the dreaded complications of pre-penicillin era.

Today, Venereologists on foreign fronts are really puzzled by the high incidence of non-gonococcal urethritis. What is most unpleasant and disappointing is not any more the physical but the psychical damage that is caused by non-gonococcal genital discharges. If for every 5 cases of gonorrhoea 30 cases of mon-gonococcal urethritis are encountered, one can imagine the plight of the V. D. Specialists entrusted with the responsibility of management of such cases as there are no specifics discovered yet for them.

When I had touched on this subject of NGU the previous evening, I had made it clear that non-gonococcal genital discharges might, in a proportion of patients, be traceable to trichomoniasis and they are easily treatable with Flagyl. Other categories of non-gonococcal genital discharges associated with a cocktail of organisms inclusive of candida or attributable to abacterial aetiology, remain to this day an enigma. Nevertheless, the conventional method of management of non-gonococcal urethritis comprises a daily intramuscular injection of I G of Streptomycin Sulphate for five days, concurrently with the administration of sulphadimidine I G. t. d. per orally for 7 days along with mixture alkaline.

Besides syphilis, gonorrhoea and non-gonococcal urethritis, lymphogranuloma venereum figures among venereal diseases. For some strange reason, granuloma venereum has not been heard of as occurring among the forces. Chancroids seem to have backed out too.

In fine, it may be stressed that today the venereologic problems comprise the the early phase of syphilis, generrhoea, NGU and lymphogranuloma venereum in male adults with pregnancy added to the female counterpart and congenital syphilis in the early phase in the new born. Chancroids and Granuloma Venereum it is emphasised, have been notably absent in the western theatres of War. If the early phase of venereal diseases is to be borne in mind it will be necessary for us to refresh our memory regarding the causative agents of these diseases, their incubation periods, the relevant symptoms and signs, pertinent to them, the several diagnostic procedures employed and the treatment schedules applicable for these conditions.

The following table focuses the essential details:
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Category of disease	Cau ative organisms	APPROX Incubation I eriod	Early signs	Diagno is	Trestment
SYPHILIS	Treponema pallidum	10-100 days	Ulcer	1. D. F. I. Test for T. P. 2. S. T. S.	PAM-6 M.U.
GONOR- RHOEA	Neisseriae Gonorrhoeae	3-7 days	Urethral discharge	I. Gram stained Smear for G. C. 2. Culture 3. F. A. T.	PAM-0.6 M. U.
CHAN- CROID	H. Ducreyi	I-7 days	Ulcer	<ol> <li>Culture,</li> <li>Auto-         inoculation         test.</li> <li>Cuti-test</li> </ol>	Sulpha- dimidine I G. t. d. for 7 days.
L. G. V.	Miyagawanella lymphogranu- lomatis	7 days	Bubo	<ol> <li>Embryonated egg culture</li> <li>Frei test</li> <li>Serum protein alteration.</li> </ol>	Sulpha- dimidine I G. t. d. for 7 days
GRANU. LOMA VENE- REUM	Donovania Granulomatis	15 days	Ulcer	I. Demonstra- tion of Donavania granuloma- tis in the smears.	Streptomy- cin sulphate I G. b. d. I. M. daily for 10 days.

In the study of early venereal diseases we have also to remember that the female sex does not come out at once with manifest early syphilis. Talking of a primary syphilitic lesion first, it is wellknown to us that a chancre in a women is not easily accessible to our view, as by its interior location it does not lend itself to exterior inspection; also owing to lack of pain associated with its existence, the sufferer herself does not appreciate its presence.

Turning to the subject of gonorrhoea, it may be mentioned that the consensus of opinion of experts based on vast experience is that a large majority of women suffering from gonorrhoea remain symtomless; that when the genitourethral and ano-rectal discharges are examined by the available methods with Methylene Blue and Gram Stain techniques, Neisseriae gonorrhoead are not easily brought outbesides, in a woman, the propitious time for smear examination seems to be just after the periods and one has to bide this time! The provocative pilocarpine nitrate test is not often productive of success. Cultures and the corollary oxidase

reaction and the ancillary sugar tests become a desideratum. Is this the reason for the disparity of figures brought out in the statistics of the Institute? For 500 men there were 14 women patients in 1962 that sought treatment for Gonorrhoea.

We do not have the Fluorescent Antibody Technique.

Judged from the standpoint of chancroids, women generally behave as carriers, though chancroids have been recorded in them occassionally.

If we turn to the subject of L, G. V. it will be seen that the initial manifestation of either the tiny herpetiform sore, or the abacterial discharge about the genitalia, does not seem to arrest the attention of the patient, for same reasons as referred to under Syphilis. The woman is not even appreciative of the development of lymph adenopathy, should it follow, as the enlargement of lymph nodes is not located about the groin. It is not inguinilisation in women. If I may put it differently, it is Iliac-isation. Unless this aspect of LGV is borne in mind, the need or necessity to suspect the existence of lymphadenopathy at such depots will be over-looked and consequently the relevant diagonistic techniques may not be employed until the woman's infection has advanced to late unmanageable phase.

Lastly, women succumb both to V. D. and pregnancy; and when infected with syphilis, they deliver congenital syphilitic infants, if obstetrical disasters are skipped, it is for the last reason that there is the need for an Obstetrician on the battle field, who should also remember the treatment procedures adopted in the management of prenatal syphilis.

In all that has been recounted so far, what was aimed at is to emphasise that venereal diseases in women in the early phase are not easily discernible, and adequate care to trace infection is of paramount importance.

The key to control or eradication of venereal diseases on the whole could be expressed in the single keynote "KNOWLEDGE" which must be spread. Enlightenment of the common man on venereal dieseases and sex hygiene, is the only sure safeguard; and to achieve this end, an all out effort must be made through education of the public.

To bring knowledge to the common man of our country is not easy.

Out difficulties are many, among which are the multilingual character of 438 million of the population of our country, inhabiting the vast sub-continent,  $1500 \times 1000$  miles in extent and the low level of literacy, standing at 21% as per the latest census. Attempts must be made to see that the truth about V. D. is broadcast in an understandable form over the length and breadth of our country; and the truth will set our commonfolk free.

In this project I cannot see anything more expedient than this that we pay special attention to women who should be more carefully educated. They play an important role as their male counterparts in whatever situation they may be placed; their service to the country is equally precious. Like the males, they are likely to

fall victim to V. D. in innocence and igonrance and in that state they may not only pass on their infection to sex partners, but in their turn to their innocent offspring congenital syphilis.

At this juncture I would like to remind you of the age-long evil of prostitution. Prostitutes spring into existence spontaneously and multiply in times of emergency. It has been made out that while the defence forces are mechanised, prostitutes get themselves motorised; today the speed with which venereal diseases traverse the globe is somewhat unimaginable; our measures of control of V. D. must therefore keep pace with this aspect of V. D. A person may expose himself at Pisa, appear in a few days at Leopoldville with the disease and ask to be treated swiftly so that he may be able to present himself at Ottawa in the next couple of days before his wife, anxiously awaiting his arrival.

So far as curative therapy of early V. D. is concerned, it has been well established that the single drug that is most specific in the management of syphilis and gonorrhoea has been pencillin in some form or another during the past decade or more. For chancroids, and LGV the treatment is with sulphadimidine given I G. t.d. per orally for seven days with suitable local medication; the treatmant of N. G. V. is unsatisfactory.

It is not so much the curative aspect of management of V. D. that we who are gathered here, should labour with, because standard treatment schedules have been well laid out and are simple and easily applicable. The accepted specifics for veneral diseases, Ladies and Gentlemen, are generally devoid of any toxicity, and are cheap; above all, the treatment procedures take much less time than that taken by a person on a jet trip from one hemisphere to another.

What is of immediate importance to my mind is timely prevention-prevention of N. G. U. Is not prevention better than cure? Actually there is no record, information about a particular army that was found to be very much involved in veneral diseases with the result that quite a high proportion of the men who should have been fighting on the front were immobilised, and were perhaps in the lavatory, laboratory or the dormitory! Many useful man hours were lost in this business. It was under these circumstances that a decision was taken that compulsory protective measures should be insisted upon and this order was at once implemented. Soon after the exercise of this compulsory measure, it was noted with relief that veneral diseases diminished to minimal levels.

What are prophylactic, pre or post coital, measures that could be effective? Time was when celibacy was talked about as the best preventive. In practice this appears to be difficult of observance. The emotional upset during an emergent situation is such that probably sexual relationship is sought in the hope of obtaining relief from emotional tension and this has very much been in evidence in the past wars with the inevitable outcome of acquisition of V. D.

Next in series have been certain prophylactic procedures in vogue for decades. I shall refer among them first to the mechanical protection afforded through the

use of the condom or the French Letter in the male which is often mispronounced 'French Leather' that is not. Women use suitably sized cervical caps. The wearing of these appliances (kindly supplied by the Health Officer, Corporation of Madras, for exhibition here to whom we owe our thanks,) has done well and should become well-known among the sexually matured adult population of the country. A point that may not be understood even today is that in the use of the French Letter a suitable lubricant must be applied not only on the outside but also over the inside of French letter.

Following this in importance is strict observance of the rituals: (i) the person concerned micturates, (ii) the genital organs are cleansed with a profusion of a non-medicated soap and water, (iii) the urthra is instilled with 5 cc. of 5 per cent silver proteinate by means of a delta syringe; the instillate is left in the passage for exactly 5 minutes by the watch and then let off, (iv) finally 33% calomel ointment is well rubbed into the superficees of the genitalia; this manoeuvre is extended to other parts close by.

Lastly there is today the antibiotic prophylaxis in PAM delivered parenterally; this has been found to be doubly useful, as this wards off not merely gonorrhoea but also treponemal infection; when one single intramuscular injection of 1.2 mega units of PAM is given.

The tragedy with all the progress so far made in venereology is that we know precious little of venereal diseases. Research in V. D. requires top priority to bridge the gaps in our knowledge of V. D. For the diagnosis of syphilis we would like to have the specific serologic test for syphilis viz., the TPI test. As far as gonorrhoea is considered we would like to discover an animal that would be suitable for laboratory studies of the infection. We must get started with the latest laboratory procedure, the F. A. T. in tha diagnosis of gonorrhoea.

The microscopic enemies engendering V. D. in our population must be totally annihilated; for this besides drugs, there cannot be any better weapon than KNOWLEDGE OF V. D.' which should be manufactured in plenty, in different languages of the country and made easily available through divisions of medical social workers, in very simple form, such as short stories, songs, gramophone records, hand bills etc. In this, the contributory role of the educated civilian population of whom we form a part, counts such.

Our country expects every medico to do his or her duty. Whether uniformed or not in battle dress, each one of us is a soldier for the duration of the emergency.

I shall not talk any more, I thank you for listening to me. I consider myself fortunate that I have been given the great opportunity of addressing you in this very same hall where nearly a quarter of a century ago, I had sat listening to my beloved teachers, as an undergraduate.