



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
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Vol. 50 No. 09

25th– 03rd Mar 2023

Vitamin D deficiency, a less addressed health issue in Sri Lanka Part II

This is the last article of series of two articles.

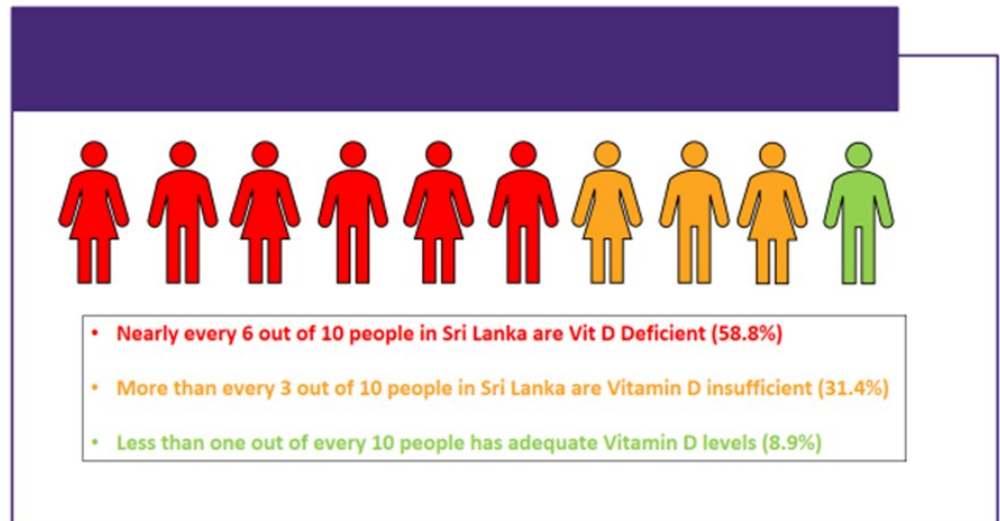
Sri Lankan situation

Among Sri Lankan adults Vitamin D deficiency was 58.8% and insufficiency 31.4%. Overall around 90% of Sri Lankan adults are not having adequate levels of vitamin D. A study conducted in Southern Sri Lanka (2013) found that overall VDD among community-dwelling healthy women was 56.2%. Another study found the age and sex-adjusted prevalence of VDD was 57.2% in an adult Sri Lankan urban population (2015). Among school children aged 10-18 years (2017), the prevalence of VDD and VDI was 13.2% (95%CI: 11.9%-

14.5%) and 45.6% (95%CI: 43.7%-47.5%), respectively. The results shown imply the high burden of VDD & VDI which suggests the government plan mitigation strategies to reduce the attributed disease burden in the country.

Prevention

In many other countries, it was considered a major public health concern and taken remedial actions by developing policies to optimize vitamin D status. Options available to improve vitamin D status are to enhance sun exposure or dietary intake through Vit – D supplementation and food fortification with vitamin D.



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WEB SRI LANKA 2023

Although improving sun exposure was a low-cost and long-known method to increase vitamin D production, was not a successful method due to practical difficulty in achieving intended behaviour changes. Therefore the preferred methods concerned were food fortification with vitamin D and Vitamin D supplementation. Many countries have succeeded in maintaining an optimum level of vitamin D status in people by fortifying food which was a highly cost-effective method with high compliance compared to vitamin D supplementation. At present, Vit D deficiency is a less addressed health issue in Sri Lanka. A main concern was the unawareness of people regarding the gravity of the issue. Therefore Island-wide awareness campaigns need to be implemented. Yet satisfactory outcomes could not be achieved only by an awareness campaign due to the difficulties in achieving behavioural change communication among people. The practical issues in improving sun exposure as well as dietary intake of vitamin D-rich food are challenged due to the limited availability and affordability of vitamin D-enriched food items. Therefore fortification of dietary foods with Vitamin D or Vit-D supplementation should be considered. The Ministry of Health has identified the inadequacy of vitamin D levels among Sri Lankans and developing a policy to address the issue concerning all the different options available in the local context.

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Table 1: Selected notifiable diseases reported by Medical Officers of Health 18th-24th Feb 2023(8th Week)

| RDHS | Dengue Fever | | Dysentery | | Encephaliti | | Enteric Fever | | Food Poi- | | Leptospirosis | | Typhus | | Viral Hep- | | Human | | Chickenpox | | Meningitis | | Leishmania- | | WRCD | |
|------------------|--------------|--------------|-----------|------------|-------------|-----------|---------------|-----------|-----------|-----------|---------------|------------|-----------|------------|------------|-----------|----------|----------|------------|------------|------------|------------|-------------|------------|-----------|-----------|
| | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | T* | C** |
| Colombo | 265 | 2461 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 3 | 2 | 31 | 0 | 0 | 2 | 2 | 0 | 0 | 4 | 25 | 1 | 5 | 0 | 3 | 15 | 93 |
| Gampaha | 162 | 1957 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 0 | 4 | 38 | 0 | 0 | 0 | 2 | 0 | 0 | 8 | 31 | 1 | 21 | 0 | 8 | 2 | 78 |
| Kalutara | 28 | 697 | 1 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 61 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 3 | 44 | 0 | 14 | 0 | 0 | 5 | 7 |
| Kandy | 47 | 556 | 0 | 7 | 0 | 0 | 0 | 1 | 0 | 1 | 32 | 1 | 14 | 0 | 0 | 0 | 0 | 5 | 47 | 0 | 3 | 2 | 6 | 60 | 100 | |
| Matale | 25 | 208 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 14 | 0 | 1 | 0 | 2 | 0 | 1 | 9 | 0 | 1 | 4 | 52 | 27 | 100 | |
| NuwarEliya | 4 | 34 | 1 | 10 | 0 | 0 | 0 | 0 | 1 | 5 | 3 | 19 | 2 | 14 | 0 | 0 | 0 | 2 | 19 | 1 | 2 | 0 | 0 | 40 | 92 | |
| Galle | 30 | 342 | 1 | 7 | 0 | 1 | 0 | 0 | 1 | 5 | 10 | 90 | 3 | 15 | 0 | 0 | 0 | 12 | 59 | 0 | 1 | 0 | 0 | 23 | 100 | |
| Hambantota | 31 | 178 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 41 | 6 | 29 | 1 | 8 | 0 | 0 | 1 | 27 | 1 | 4 | 16 | 74 | 28 | 100 | |
| Matara | 30 | 300 | 1 | 6 | 2 | 2 | 0 | 0 | 3 | 6 | 67 | 0 | 7 | 1 | 2 | 0 | 0 | 7 | 45 | 0 | 5 | 5 | 27 | 45 | 100 | |
| Jaffna | 44 | 642 | 1 | 9 | 0 | 1 | 0 | 2 | 1 | 4 | 4 | 25 | 247 | 0 | 0 | 0 | 1 | 3 | 20 | 0 | 0 | 0 | 0 | 62 | 86 | |
| Kilinochchi | 0 | 31 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 13 | 97 | |
| Mannar | 2 | 23 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 18 | 55 | |
| Vavuniya | 0 | 7 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 72 |
| Mullaitivu | 3 | 8 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 18 | 58 | |
| Batticaloa | 58 | 348 | 4 | 44 | 0 | 4 | 0 | 2 | 0 | 6 | 0 | 18 | 0 | 0 | 1 | 1 | 0 | 3 | 16 | 1 | 7 | 0 | 0 | 34 | 100 | |
| Ampara | 6 | 38 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 0 | 0 | 1 | 0 | 0 | 15 | 0 | 5 | 0 | 2 | 13 | 93 | |
| Trincomalee | 29 | 294 | 2 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 12 | 1 | 5 | 0 | 0 | 0 | 0 | 8 | 0 | 3 | 0 | 1 | 19 | 100 | | |
| Kurunegala | 40 | 549 | 1 | 7 | 0 | 3 | 0 | 0 | 0 | 0 | 5 | 46 | 1 | 6 | 1 | 3 | 0 | 10 | 91 | 2 | 23 | 9 | 81 | 20 | 97 | |
| Puttalam | 154 | 1569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 22 | 0 | 10 | 0 | 0 | 12 | 98 | |
| Anuradhapur | 8 | 104 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 73 | 2 | 14 | 0 | 0 | 0 | 6 | 41 | 0 | 7 | 8 | 85 | 18 | 97 | |
| Polonnaruwa | 17 | 152 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 31 | 1 | 3 | 0 | 3 | 0 | 1 | 14 | 0 | 8 | 10 | 74 | 20 | 92 | |
| Badulla | 16 | 288 | 2 | 8 | 0 | 2 | 0 | 0 | 4 | 4 | 61 | 0 | 3 | 0 | 20 | 0 | 5 | 5 | 24 | 0 | 5 | 0 | 6 | 48 | 100 | |
| Monaragala | 5 | 79 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 66 | 0 | 9 | 1 | 4 | 0 | 0 | 11 | 0 | 18 | 0 | 27 | 14 | 100 | |
| Ratnapura | 50 | 353 | 0 | 6 | 0 | 3 | 0 | 1 | 0 | 5 | 21 | 164 | 1 | 9 | 2 | 6 | 0 | 7 | 18 | 9 | 40 | 6 | 31 | 28 | 100 | |
| Kegalle | 49 | 467 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 8 | 58 | 1 | 6 | 0 | 1 | 0 | 0 | 6 | 68 | 1 | 9 | 1 | 4 | 21 | 99 | |
| Kalmune | 36 | 811 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 5 | 0 | 0 | 34 | 93 | |
| SRI LANKA | 113 | 12496 | 15 | 152 | 3 | 25 | 1 | 10 | 4 | 47 | 90 | 974 | 44 | 400 | 9 | 56 | 0 | 2 | 86 | 663 | 18 | 198 | 61 | 481 | 27 | 94 |

Source: Weekly Returns of Communicable Diseases (esurveillance.epid.gov.lk). T=Timeliness refers to returns received on or before 24th Feb, 2023. Total number of reporting units 358. Number of reporting units data provided for the current week: 310. C**=Completeness

Table 2: Vaccine-Preventable Diseases & AFP

18th–24th Feb 2023(8th Week)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2023 | Number of cases during same week in 2022 | Total number of cases to date in 2023 | Total number of cases to date in 2022 | Difference between the number of cases to date in 2023 & 2022 |
|-----------------------|--------------------------|----|----|----|----|----|----|----|-----|---|--|---------------------------------------|---------------------------------------|---|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| AFP* | 01 | 00 | 01 | 00 | 00 | 00 | 01 | 00 | 00 | 03 | 02 | 13 | 11 | 18.18 % |
| Diphtheria | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 % |
| Mumps | 01 | 00 | 00 | 00 | 01 | 00 | 00 | 00 | 00 | 02 | 01 | 27 | 06 | 350 % |
| Measles | 02 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 02 | 01 | 03 | 06 | - 50 % |
| Rubella | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 % |
| CRS** | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 % |
| Tetanus | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 | 0 % |
| Neonatal Tetanus | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 % |
| Japanese Encephalitis | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 0 % |
| Whooping Cough | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 0 % |
| Tuberculosis | 48 | 22 | 11 | 19 | 21 | 44 | 05 | 07 | 13 | 185 | 63 | 1280 | 1037 | 23.4 % |

Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.
RDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna, KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam, AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:
Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,
Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis
CRS** =Congenital Rubella Syndrome
NA = Not Available

Number of Malaria Cases Up to End of February 2023,
05
All are Imported!!!

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@slt.net.lk. **Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

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