**USULAN TUGAS AKHIR**

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| --- |
| **SISTEM PAKAR DIAGNOSA GIZI BURUK PADA BALITA DENGAN METODE BAYESIAN NETWORK** |



**Oleh:**

**DETI YULIAWATI**

**F1D 014 022**

**PROGRAM STUDI TEKNIK INFORMATIKA**

**FAKULTAS TEKNIK**

**UNIVERSITAS MATARAM**

**2018**

**Usulan Tugas Akhir**

**SISTEM PAKAR DIAGNOSA GIZI BURUK PADA BALITA DENGAN METODE BAYESIAN NETWORK**

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Telah diperiksa dan disetujui oleh Tim Pembimbing:

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**SISTEM PAKAR DIAGNOSA GIZI BURUK PADA BALITA DENGAN METODE BAYESIAN NETWORK**

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|  |  | |  |
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**LAMPIRAN**

Tabel 2.4 Penilaian status gizi balita laki-laki (Sedyaningsih, 2010)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Umur**  **(Bulan)** | **Berat Badan (Kg)** | | | | | | |
| -3 SD | -2 SD | -1 SD | Median | 1 SD | 2 SD | 3 SD |
| 0 | 2.1 | 2.5 | 2.9 | 3.3 | 3.9 | 4.4 | 5.0 |
| 1 | 2.9 | 3.4 | 3.9 | 4.5 | 5.1 | 5.8 | 6.6 |
| 2 | 3.8 | 4.3 | 4.9 | 5.6 | 6.3 | 7.1 | 8.0 |
| 3 | 4.4 | 5.0 | 5.7 | 6.4 | 7.2 | 8.0 | 9.0 |
| 4 | 4.9 | 5.6 | 6.2 | 7.0 | 7.8 | 8.7 | 9.7 |
| 5 | 5.3 | 6.0 | 6.7 | 7.5 | 8.4 | 9.3 | 10.4 |
| 6 | 5.7 | 6.4 | 7.1 | 7.9 | 8.8 | 9.8 | 10.9 |
| 7 | 5.9 | 6.7 | 7.4 | 8.3 | 9.2 | 10.3 | 11.4 |
| 8 | 6.2 | 6.9 | 7.7 | 8.6 | 9.6 | 10.7 | 11.9 |
| 9 | 6.4 | 7.1 | 8.0 | 8.9 | 9.9 | 11.0 | 12.3 |
| 10 | 6.6 | 7.4 | 8.2 | 9.2 | 10.2 | 11.4 | 12.7 |
| 11 | 6.8 | 7.6 | 8.4 | 9.4 | 10.5 | 11.7 | 13.0 |
| 12 | 6.9 | 7.7 | 8.6 | 9.6 | 10.8 | 12.0 | 13.3 |
| 13 | 7.1 | 7.9 | 8.8 | 9.9 | 11.0 | 12.3 | 13.7 |
| 14 | 7.2 | 8.1 | 9.0 | 10.1 | 11.3 | 12.6 | 14.0 |
| 15 | 7.4 | 8.3 | 9.2 | 10.3 | 11.5 | 12.8 | 14.3 |
| 16 | 7.5 | 8.4 | 9.4 | 10.5 | 11.7 | 13.1 | 14.6 |
| 17 | 7.7 | 8.6 | 9.6 | 10.7 | 12.0 | 13.4 | 14.9 |
| 18 | 7.8 | 8.8 | 9.8 | 10.9 | 12.2 | 13.7 | 15.3 |
| 19 | 8.0 | 8.9 | 10.0 | 11.1 | 12.5 | 13.9 | 15.6 |
| 20 | 8.1 | 9.1 | 10.1 | 11.3 | 12.7 | 14.2 | 15.9 |
| 21 | 8.2 | 9.2 | 10.3 | 11.5 | 12.9 | 14.5 | 16.2 |
| 22 | 8.4 | 9.4 | 10.5 | 11.8 | 13.2 | 14.7 | 16.5 |
| 23 | 8.5 | 9.5 | 10.7 | 12.0 | 13.4 | 15.0 | 16.8 |
| 24 | 8.6 | 9.7 | 10.8 | 12.2 | 13.6 | 15.3 | 17.1 |
| 25 | 8.8 | 9.8 | 11.0 | 12.4 | 13.9 | 15.5 | 17.5 |
| 26 | 8.9 | 10.0 | 11.2 | 12.5 | 14.1 | 15.8 | 17.8 |
| 27 | 9.0 | 10.1 | 11.3 | 12.7 | 14.3 | 16.1 | 18.1 |
| 28 | 9.1 | 10.2 | 11.5 | 12.9 | 14.5 | 16.3 | 18.4 |
| 29 | 9.2 | 10.4 | 11.7 | 13.1 | 14.8 | 16.6 | 18.7 |
| 30 | 9.4 | 10.5 | 11.8 | 13.3 | 15.0 | 16.9 | 19.0 |
| 31 | 9.5 | 10.7 | 12.0 | 13.5 | 15.2 | 17.1 | 19.3 |
| 32 | 9.6 | 10.8 | 12.1 | 13.7 | 15.4 | 17.4 | 19.6 |
| 33 | 9.7 | 10.9 | 12.3 | 13.8 | 15.6 | 17.6 | 19.9 |
| 34 | 9.8 | 11.0 | 12.4 | 14.0 | 15.8 | 17.8 | 20.2 |
| 35 | 9.9 | 11.2 | 12.6 | 14.2 | 16.0 | 18.1 | 20.4 |
| 36 | 10.0 | 11.3 | 12.7 | 14.3 | 16.2 | 18.3 | 20.7 |
| 37 | 10.1 | 11.4 | 12.9 | 14.5 | 16.4 | 18.6 | 21.0 |
| 38 | 10.2 | 11.5 | 13.0 | 14.7 | 16.6 | 18.8 | 21.3 |
| 39 | 10.3 | 11.6 | 13.1 | 14.8 | 16.8 | 19.0 | 21.6 |
| 40 | 10.4 | 11.8 | 13.3 | 15.0 | 17.0 | 19.3 | 21.9 |

Tabel 2.5 Lanjutan tabel penilaian status gizi balita laki-laki (Sedyaningsih, 2010)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Umur**  **(Bulan)** | **Berat Badan (Kg)** | | | | | | |
| -3 SD | -2 SD | -1 SD | Median | 1 SD | 2 SD | 3 SD |
| 41 | 10.5 | 11.9 | 13.4 | 15.2 | 17.2 | 19.5 | 22.1 |
| 42 | 10.6 | 12.0 | 13.6 | 15.3 | 17.4 | 19.7 | 22.4 |
| 43 | 10.7 | 12.1 | 13.7 | 15.5 | 17.6 | 20.0 | 22.7 |
| 44 | 10.8 | 12.2 | 13.8 | 15.7 | 17.8 | 20.2 | 23.0 |
| 45 | 10.9 | 12.4 | 14.0 | 15.8 | 18.0 | 20.5 | 23.3 |
| 46 | 11.0 | 12.5 | 14.1 | 16.0 | 18.2 | 20.7 | 23.6 |
| 47 | 11.1 | 12.6 | 14.3 | 16.2 | 18.4 | 20.9 | 23.9 |
| 48 | 11.2 | 12.7 | 14.4 | 16.3 | 18.6 | 21.2 | 24.2 |
| 49 | 11.3 | 12.8 | 14.5 | 16.5 | 18.8 | 21.4 | 24.5 |
| 50 | 11.4 | 12.9 | 14.7 | 16.7 | 19.0 | 21.7 | 24.8 |
| 51 | 11.5 | 13.1 | 14.8 | 16.8 | 19.2 | 21.9 | 25.1 |
| 52 | 11.6 | 13.2 | 15.0 | 17.0 | 19.4 | 22.2 | 25.4 |
| 53 | 11.7 | 13.3 | 15.1 | 17.2 | 19.6 | 22.4 | 25.7 |
| 54 | 11.8 | 13.4 | 15.2 | 17.3 | 19.8 | 22.7 | 26.0 |
| 55 | 11.9 | 13.5 | 15.4 | 17.5 | 20.0 | 22.9 | 26.3 |
| 56 | 12.0 | 13.6 | 15.5 | 17.7 | 20.2 | 23.2 | 26.6 |
| 57 | 12.1 | 13.7 | 15.6 | 17.8 | 20.4 | 23.4 | 26.9 |
| 58 | 12.2 | 13.8 | 15.8 | 18.0 | 20.6 | 23.7 | 27.2 |
| 59 | 12.3 | 14.0 | 15.9 | 18.2 | 20.8 | 23.9 | 27.6 |
| 60 | 12.4 | 14.1 | 16.0 | 18.3 | 21.0 | 24.2 | 27.9 |

Tabel 2.6 Penilaian status gizi balita perempuan (Sedyaningsih, 2010)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Umur**  **(Bulan)** | **Berat Badan (Kg)** | | | | | | |
| -3 SD | -2 SD | -1 SD | Median | 1 SD | 2 SD | 3 SD |
| 0 | 2.0 | 2.4 | 2.8 | 3.2 | 3.7 | 4.2 | 4.8 |
| 1 | 2.7 | 3.2 | 3.6 | 4.2 | 4.8 | 5.5 | 6.2 |
| 2 | 3.4 | 3.9 | 4.5 | 5.1 | 5.8 | 6.6 | 7.5 |
| 3 | 4.0 | 4.5 | 5.2 | 5.8 | 6.6 | 7.5 | 8.5 |
| 4 | 4.4 | 5.0 | 5.7 | 6.4 | 7.3 | 8.2 | 9.3 |
| 5 | 4.8 | 5.4 | 6.1 | 6.9 | 7.8 | 8.8 | 10.0 |
| 6 | 5.1 | 5.7 | 6.5 | 7.3 | 8.2 | 9.3 | 10.6 |
| 7 | 5.3 | 6.0 | 6.8 | 7.6 | 8.6 | 9.8 | 11.1 |
| 8 | 5.6 | 6.3 | 7.0 | 7.9 | 9.0 | 10.2 | 11.6 |
| 9 | 5.8 | 6.5 | 7.3 | 8.2 | 9.3 | 10.5 | 12.0 |
| 10 | 5.9 | 6.7 | 7.5 | 8.5 | 9.6 | 10.9 | 12.4 |
| 11 | 6.1 | 6.9 | 7.7 | 8.7 | 9.9 | 11.2 | 12.8 |
| 12 | 6.3 | 7.0 | 7.9 | 8.9 | 10.1 | 11.5 | 13.1 |
| 13 | 6.4 | 7.2 | 8.1 | 9.2 | 10.4 | 11.8 | 13.5 |
| 14 | 6.6 | 7.4 | 8.3 | 9.4 | 10.6 | 12.1 | 13.8 |
| 15 | 6.7 | 7.6 | 8.5 | 9.6 | 10.9 | 12.4 | 14.1 |

Tabel 2.7 Lanjutan tabel penilaian status gizi balita perempuan (Sedyaningsih, 2010)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Umur**  **(Bulan)** | **Berat Badan (Kg)** | | | | | | |
| -3 SD | -2 SD | -1 SD | Median | 1 SD | 2 SD | 3 SD |
| 16 | 6.9 | 7.7 | 8.7 | 9.8 | 11.1 | 12.6 | 14.5 |
| 17 | 7.0 | 7.9 | 8.9 | 10.0 | 11.4 | 12.9 | 14.8 |
| 18 | 7.2 | 8.1 | 9.1 | 10.2 | 11.6 | 13.2 | 15.1 |
| 19 | 7.3 | 8.2 | 9.2 | 10.4 | 11.8 | 13.5 | 15.4 |
| 20 | 7.5 | 8.4 | 9.4 | 10.6 | 12.1 | 13.7 | 15.7 |
| 21 | 7.6 | 8.6 | 9.6 | 10.9 | 12.3 | 14.0 | 16.0 |
| 22 | 7.8 | 8.7 | 9.8 | 11.1 | 12.5 | 14.3 | 16.4 |
| 23 | 7.9 | 8.9 | 10.0 | 11.3 | 12.8 | 14.6 | 16.7 |
| 24 | 8.1 | 9.0 | 10.2 | 11.5 | 13.0 | 14.8 | 17.0 |
| 25 | 8.2 | 9.2 | 10.3 | 11.7 | 13.3 | 15.1 | 17.3 |
| 26 | 8.4 | 9.4 | 10.5 | 11.9 | 13.5 | 15.4 | 17.7 |
| 27 | 8.5 | 9.5 | 10.7 | 12.1 | 13.7 | 15.7 | 18.0 |
| 28 | 8.6 | 9.7 | 10.9 | 12.3 | 14.0 | 16.0 | 18.3 |
| 29 | 8.8 | 9.8 | 11.1 | 12.5 | 14.2 | 16.2 | 18.7 |
| 30 | 8.9 | 10.0 | 11.2 | 12.7 | 14.4 | 16.5 | 19.0 |
| 31 | 9.0 | 10.1 | 11.4 | 12.9 | 14.7 | 16.8 | 19.3 |
| 32 | 9.1 | 10.3 | 11.6 | 13.1 | 14.9 | 17.1 | 19.6 |
| 33 | 9.3 | 10.4 | 11.7 | 13.3 | 15.1 | 17.3 | 20.0 |
| 34 | 9.4 | 10.5 | 11.9 | 13.5 | 15.4 | 17.6 | 20.3 |
| 35 | 9.5 | 10.7 | 12.0 | 13.7 | 15.6 | 17.9 | 20.6 |
| 36 | 9.6 | 10.8 | 12.2 | 13.9 | 15.8 | 18.1 | 20.9 |
| 37 | 9.7 | 10.9 | 12.4 | 14.0 | 16.0 | 18.4 | 21.3 |
| 38 | 9.8 | 11.1 | 12.5 | 14.2 | 16.3 | 18.7 | 21.6 |
| 39 | 9.9 | 11.2 | 12.7 | 14.4 | 16.5 | 19.0 | 22.0 |
| 40 | 10.1 | 11.3 | 12.8 | 14.6 | 16.7 | 19.2 | 22.3 |
| 41 | 10.2 | 11.5 | 13.0 | 14.8 | 16.9 | 19.5 | 22.7 |
| 42 | 10.3 | 11.6 | 13.1 | 15.0 | 17.2 | 19.8 | 23.0 |
| 43 | 10.4 | 11.7 | 13.3 | 15.2 | 17.4 | 20.1 | 23.4 |
| 44 | 10.5 | 11.8 | 13.4 | 15.3 | 17.6 | 20.4 | 23.7 |
| 45 | 10.6 | 12.0 | 13.6 | 15.5 | 17.8 | 20.7 | 24.1 |
| 46 | 10.7 | 12.1 | 13.7 | 15.7 | 18.1 | 20.9 | 24.5 |
| 47 | 10.8 | 12.2 | 13.9 | 15.9 | 18.3 | 21.2 | 24.8 |
| 48 | 10.9 | 12.3 | 14.0 | 16.1 | 18.5 | 21.5 | 25.2 |
| 49 | 11.0 | 12.4 | 14.2 | 16.3 | 18.8 | 21.8 | 25.5 |
| 50 | 11.1 | 12.6 | 14.3 | 16.4 | 19.0 | 22.1 | 25.9 |
| 51 | 11.2 | 12.7 | 14.5 | 16.6 | 19.2 | 22.4 | 26.3 |
| 52 | 11.3 | 12.8 | 14.6 | 16.8 | 19.4 | 22.6 | 26.6 |
| 53 | 11.4 | 12.9 | 14.8 | 17.0 | 19.7 | 22.9 | 27.0 |
| 54 | 11.5 | 13.0 | 14.9 | 17.2 | 19.9 | 23.2 | 27.4 |
| 55 | 11.6 | 13.2 | 15.1 | 17.3 | 20.1 | 23.5 | 27.7 |

Tabel 2.8 Lanjutan tabel penilaian status gizi balita perempuan (Sedyaningsih, 2010)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Umur**  **(Bulan)** | **Berat Badan (Kg)** | | | | | | |
| -3 SD | -2 SD | -1 SD | Median | 1 SD | 2 SD | 3 SD |
| 56 | 11.7 | 13.3 | 15.2 | 17.5 | 20.3 | 23.8 | 28.1 |
| 57 | 11.8 | 13.4 | 15.3 | 17.7 | 20.6 | 24.1 | 28.5 |
| 58 | 11.9 | 13.5 | 15.5 | 17.9 | 20.8 | 24.4 | 28.8 |
| 59 | 12.0 | 13.6 | 15.6 | 18.0 | 21.0 | 24.6 | 29.2 |
| 60 | 12.1 | 13.7 | 15.8 | 18.2 | 21.2 | 24.9 | 29.5 |

Tabel 2.9 Klasifikasi tipe gizi buruk beserta gejala

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Gejala** | **Gizi Buruk** | | |
| **Kwasiorkor** | **Marasmus** | **Marasmus-Kwasiorkor** |
| 1. | Pembengkakan pada punggung membulat dan lembab | √ |  | √ |
| 2. | Pembengkakan pada kaki membulat dan lembab | √ |  | √ |
| 3. | Pembengkakan pada wajah membulat dan lembab | √ |  | √ |
| 4. | Pandangan mata sayu | √ |  | √ |
| 5. | Rambut tipis kemerahan seperti warna rambut jagung dan mudah dicabut tanpa rasa sakit dan mudah rontok | √ |  | √ |
| 6. | Terjadi perubahan status mental menjadi apatis dan rewel | √ | √ | √ |
| 7. | Terjadi pengerasan di uluh hati | √ |  | √ |
| 8. | Otot mengecil (hipotrofi), lebih nyata bila diperiksa pada posisi berdiri atau duduk | √ |  | √ |
| 9. | Terdapat kelainan kulit berupa bercak merah muda yang meluas dana berubah warna menjadi cokelat kehitaman lalu terkelupas | √ |  | √ |
| 10. | Sering disertai penyakit infeksi yang umumnya akut | √ | √ | √ |
| 11. | Anemia dan diare | √ | √ | √ |
| 12. | Badan Nampak sangat kurus seolah-olah tulang hanya terbungkus kulit |  | √ | √ |
| 13. | Wajah seperti orang tua |  | √ | √ |
| 14. | Kulit menjadi keriput |  | √ | √ |
| 15. | Jaringan lemak subkutis sangat sedikit sampai tidak ada |  | √ | √ |
| 16 | Perut cekung dan iga gambang |  | √ | √ |
| 17. | Sering disertai penyakit infeksi (umumnya kronis berulang) |  | √ | √ |
| 18. | Pembengkakan yang tidak mencolok |  |  | √ |

Tabel 3.1 *Prior Probability*

|  |  |  |  |
| --- | --- | --- | --- |
| No | Kode Gejala | Nama Gejala | Nilai |
| 1 | G01 | Pembengkakan pada punggung membulat dan lembab | 0.3 |
| 2 | G02 | Pembengkakan pada kaki membulat dan lembab | 0.6 |
| 3 | G03 | Pembengkakan pada wajah membulat dan lembab | 0.7 |
| 4 | G04 | Pandangan mata sayu | 0.6 |
| 5 | G05 | Rambut tipis kemerahan seperti warna rambut jagung dan mudah dicabut tanpa rasa sakit dan mudah rontok | 0.7 |
| 6 | G06 | Terjadi perubahan status mental menjadi apatis dan rewel | 0.7 |
| 7 | G07 | Terjadi pengerasan di uluh hati | 0.4 |
| 8 | G08 | Otot mengecil (hipotrofi), lebih nyata bila diperiksa pada posisi berdiri atau duduk | 0.7 |
| 9 | G09 | Terdapat kelainan kulit berupa bercak merah muda yang meluas dana berubah warna menjadi cokelat kehitaman lalu terkelupas | 0.4 |
| 10 | G10 | Sering disertai penyakit infeksi yang umumnya akut | 0.8 |
| 11 | G11 | Anemia dan diare | 0.8 |
| 12 | G12 | Badan Nampak sangat kurus seolah-olah tulang hanya terbungkus kulit | 0.9 |
| 13 | G13 | Wajah seperti orang tua | 0.9 |
| 14 | G14 | Kulit menjadi keriput | 0.8 |
| 15 | G15 | Jaringan lemak subkutis sangat sedikit sampai tidak ada | 0.7 |
| 16 | G16 | Perut cekung dan iga gambang | 0.7 |
| 17 | G17 | Sering disertai penyakit infeksi (umumnya kronis berulang) | 0.8 |
| 18 | G18 | Pembengkakan yang tidak mencolok | 0.5 |

Tabel 3.2 Tabel *conditional probability* gizi buruk kwasiorkor

|  |  |  |
| --- | --- | --- |
| **Gejala** | **Penyakit gizi buruk** | |
| **Present** | **Absent** |
| **Bengkak punggung** |  |  |
| **Positif** | 0.6 | 0.7 |
| **Negatif** | 0.4 | 0.3 |
| **Bengkak Kaki** |  |  |
| **Positif** | 0.8 | 0.6 |
| **Negatif** | 0.2 | 0.4 |
| **Bengkak wajah** |  |  |
| **Positif** | 0.8 | 0.6 |
| **Negatif** | 0.2 | 0.4 |
| **Mata sayu** |  |  |
| **Positif** | 0.5 | 0.7 |
| **Negatif** | 0.5 | 0.2 |
| **Rambut tipis** |  |  |
| **Positif** | 0.8 | 0.8 |
| **Negatif** | 0.2 | 0.2 |
| **Status Mental** |  |  |
| **Positif** | 0.8 | 0.9 |
| **Negatif** | 0.2 | 0.1 |
| **Pengerasan uluh hati** |  |  |
| **Positif** | 0.4 | 0.9 |
| **Negatif** | 0.6 | 0.1 |
| **Otot Mengecil** |  |  |
| **Positif** | 0.4 | 0.7 |
| **Negatif** | 0.6 | 0.3 |
| **Kelainan kulit** |  |  |
| **Positif** | 0.4 | 0.8 |
| **Negatif** | 0.6 | 0.2 |
| **Infeksi akut** |  |  |
| **Positif** | 0.7 | 0.6 |
| **Negatif** | 0.3 | 0.4 |
| **Anemia dan diare** |  |  |
| **Positif** | 0.7 | 0.6 |
| **Negatif** | 0.3 | 0.4 |

Tabel 3.3 Tabel *conditional probability* gizi buruk marasmus

|  |  |  |
| --- | --- | --- |
| **Gejala** | **Penyakit gizi buruk** | |
| **Present** | **Absent** |
| **Status Mental** |  |  |
| **Positif** | 0.8 | 0.9 |
| **Negatif** | 0.2 | 0.1 |
| **Infeksi akut** |  |  |
| **Positif** | 0.7 | 0.6 |
| **Negatif** | 0.3 | 0.4 |
| **Anemia dan diare** |  |  |
| **Positif** | 0.7 | 0.6 |
| **Negatif** | 0.3 | 0.4 |
| **Badan kurus** |  |  |
| **Positif** | 0.9 | 0.2 |
| **Negatif** | 0.1 | 0.8 |
| **Wajah orang tua** |  |  |
| **Positif** | 0.9 | 0.4 |
| **Negatif** | 0.1 | 0.6 |
| **Kulit Keriput** |  |  |
| **Positif** | 0.7 | 0.3 |
| **Negatif** | 0.3 | 0.7 |
| **Jaringan subkutis** |  |  |
| **Positif** | 0.7 | 0.3 |
| **Negatif** | 0.3 | 0.7 |
| **Perut cekung** |  |  |
| **Positif** | 0.8 | 0.4 |
| **Negatif** | 0.2 | 0.6 |
| **Infeksi kronis berulang** |  |  |
| **Positif** | 0.7 | 0.5 |
| **Negatif** | 0.3 | 0.5 |

Tabel 3.4 Tabel *conditional probability* gizi buruk marasmus-kwasiorkor

|  |  |  |
| --- | --- | --- |
| **Gejala** | **Penyakit gizi buruk** | |
| **Present** | **Absent** |
| **Bengkak punggung** |  |  |
| **Positif** | 0.6 | 0.7 |
| **Negatif** | 0.4 | 0.3 |
| **Bengkak Kaki** |  |  |
| **Positif** | 0.8 | 0.6 |
| **Negatif** | 0.2 | 0.4 |
| **Bengkak wajah** |  |  |
| **Positif** | 0.8 | 0.6 |
| **Negatif** | 0.2 | 0.4 |
| **Mata sayu** |  |  |
| **Positif** | 0.5 | 0.7 |
| **Negatif** | 0.5 | 0.2 |
| **Rambut tipis** |  |  |
| **Positif** | 0.8 | 0.8 |
| **Negatif** | 0.2 | 0.2 |
| **Status Mental** |  |  |
| **Positif** | 0.8 | 0.9 |
| **Negatif** | 0.2 | 0.1 |
| **Pengerasan uluh hati** |  |  |
| **Positif** | 0.4 | 0.9 |
| **Negatif** | 0.6 | 0.1 |
| **Otot Mengecil** |  |  |
| **Positif** | 0.4 | 0.7 |
| **Negatif** | 0.6 | 0.3 |
| **Kelainan kulit** |  |  |
| **Positif** | 0.4 | 0.8 |
| **Negatif** | 0.6 | 0.2 |
| **Infeksi akut** |  |  |
| **Positif** | 0.7 | 0.6 |
| **Negatif** | 0.3 | 0.4 |
| **Anemia dan diare** |  |  |
| **Positif** | 0.7 | 0.6 |
| **Negatif** | 0.3 | 0.4 |
| **Badan kurus** |  |  |
| **Positif** | 0.9 | 0.2 |
| **Negatif** | 0.1 | 0.8 |
| **Wajah orang tua** |  |  |
| **Positif** | 0.9 | 0.4 |
| **Negatif** | 0.1 | 0.6 |
| **Kulit Keriput** |  |  |
| **Positif** | 0.7 | 0.3 |
| **Negatif** | 0.3 | 0.7 |
| **Jaringan subkutis** |  |  |
| **Positif** | 0.7 | 0.3 |
| **Negatif** | 0.3 | 0.7 |
| **Perut cekung** |  |  |
| **Positif** | 0.8 | 0.4 |
| **Negatif** | 0.2 | 0.6 |
| **Infeksi kronis berulang** |  |  |
| **Positif** | 0.7 | 0.5 |
| **Negatif** | 0.3 | 0.5 |

Tabel 3.5 *Joint probability distribution* gizi buruk kwasiorkor

|  |  |  |
| --- | --- | --- |
| **Gejala** | **Penyakit gizi buruk** | |
| **Present** | **Absent** |
| **Bengkak punggung** |  |  |
| **Positif** | 0.18 | 0.49 |
| **Negatif** | 0.12 | 0.21 |
| **Bengkak Kaki** |  |  |
| **Positif** | 0.48 | 0.24 |
| **Negatif** | 0.12 | 0.16 |
| **Bengkak wajah** |  |  |
| **Positif** | 0.56 | 0.18 |
| **Negatif** | 0.14 | 0.12 |
| **Mata sayu** |  |  |
| **Positif** | 0.3 | 0.28 |
| **Negatif** | 0.3 | 0.12 |
| **Rambut tipis** |  |  |
| **Positif** | 0.56 | 0.24 |
| **Negatif** | 0.14 | 0.06 |
| **Status Mental** |  |  |
| **Positif** | 0.56 | 0.27 |
| **Negatif** | 0.14 | 0.03 |
| **Pengerasan uluh hati** |  |  |
| **Positif** | 0.16 | 0.54 |
| **Negatif** | 0.24 | 0.06 |
| **Otot Mengecil** |  |  |
| **Positif** | 0.28 | 0.21 |
| **Negatif** | 0.42 | 0.09 |
| **Kelainan kulit** |  |  |
| **Positif** | 0.16 | 0.48 |
| **Negatif** | 0.24 | 0.12 |
| **Infeksi akut** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.24 | 0.08 |
| **Anemia dan diare** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.24 | 0.08 |

Tabel 3.6 *Joint probability distribution* gizi buruk marasmus

|  |  |  |
| --- | --- | --- |
| **Gejala** | **Penyakit gizi buruk** | |
| **Present** | **Absent** |
| **Status Mental** |  |  |
| **Positif** | 0.56 | 0.27 |
| **Negatif** | 0.14 | 0.03 |
| **Infeksi akut** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.24 | 0.08 |
| **Anemia dan diare** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.24 | 0.08 |
| **Badan kurus** |  |  |
| **Positif** | 0.81 | 0.02 |
| **Negatif** | 0.09 | 0.08 |
| **Wajah orang tua** |  |  |
| **Positif** | 0.81 | 0.04 |
| **Negatif** | 0.09 | 0.06 |
| **Kulit Keriput** |  |  |
| **Positif** | 0.56 | 0.06 |
| **Negatif** | 0.24 | 0.14 |
| **Jaringan subkutis** |  |  |
| **Positif** | 0.49 | 0.09 |
| **Negatif** | 0.21 | 0.21 |
| **Perut cekung** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.14 | 0.18 |
| **Infeksi kronis berulang** |  |  |
| **Positif** | 0.56 | 0.1 |
| **Negatif** | 0.24 | 0.1 |

Tabel 3.7 *Joint probability distribution* gizi buruk marasmus-kwasiorkor

|  |  |  |
| --- | --- | --- |
| **Gejala** | **Penyakit gizi buruk** | |
| **Present** | **Absent** |
| **Bengkak punggung** |  |  |
| **Positif** | 0.18 | 0.49 |
| **Negatif** | 0.12 | 0.21 |
| **Bengkak Kaki** |  |  |
| **Positif** | 0.48 | 0.24 |
| **Negatif** | 0.12 | 0.16 |
| **Bengkak wajah** |  |  |
| **Positif** | 0.56 | 0.18 |
| **Negatif** | 0.14 | 0.12 |
| **Mata sayu** |  |  |
| **Positif** | 0.3 | 0.28 |
| **Negatif** | 0.3 | 0.12 |
| **Rambut tipis** |  |  |
| **Positif** | 0.56 | 0.24 |
| **Negatif** | 0.14 | 0.06 |
| **Status Mental** |  |  |
| **Positif** | 0.56 | 0.27 |
| **Negatif** | 0.14 | 0.03 |
| **Pengerasan uluh hati** |  |  |
| **Positif** | 0.16 | 0.54 |
| **Negatif** | 0.24 | 0.06 |
| **Otot Mengecil** |  |  |
| **Positif** | 0.28 | 0.21 |
| **Negatif** | 0.42 | 0.09 |
| **Kelainan kulit** |  |  |
| **Positif** | 0.16 | 0.48 |
| **Negatif** | 0.24 | 0.12 |
| **Infeksi akut** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.24 | 0.08 |
| **Anemia dan diare** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.24 | 0.08 |
| **Badan kurus** |  |  |
| **Positif** | 0.81 | 0.02 |
| **Negatif** | 0.09 | 0.08 |
| **Wajah orang tua** |  |  |
| **Positif** | 0.81 | 0.04 |
| **Negatif** | 0.09 | 0.06 |
| **Kulit Keriput** |  |  |
| **Positif** | 0.56 | 0.06 |
| **Negatif** | 0.24 | 0.14 |
| **Jaringan subkutis** |  |  |
| **Positif** | 0.49 | 0.09 |
| **Negatif** | 0.21 | 0.21 |
| **Perut cekung** |  |  |
| **Positif** | 0.56 | 0.12 |
| **Negatif** | 0.14 | 0.18 |
| **Infeksi kronis berulang** |  |  |
| **Positif** | 0.56 | 0.1 |
| **Negatif** | 0.24 | 0.1 |

Tabel 3.10 *Posterior Probability*

|  |  |  |  |
| --- | --- | --- | --- |
| No | Kode Gejala | Nama Gejala | Nilai |
| 1 | G01 | Pembengkakan pada punggung membulat dan lembab | 0.2686 |
| 2 | G02 | Pembengkakan pada kaki membulat dan lembab | 0.6667 |
| 3 | G03 | Pembengkakan pada wajah membulat dan lembab | 0.7568 |
| 4 | G04 | Pandangan mata sayu | 0.5172 |
| 5 | G05 | Rambut tipis kemerahan seperti warna rambut jagung dan mudah dicabut tanpa rasa sakit dan mudah rontok | 0.7 |
| 6 | G06 | Terjadi perubahan status mental menjadi apatis dan rewel | 0.6747 |
| 7 | G07 | Terjadi pengerasan di uluh hati | 0.2286 |
| 8 | G08 | Otot mengecil (hipotrofi), lebih nyata bila diperiksa pada posisi berdiri atau duduk | 0.5714 |
| 9 | G09 | Terdapat kelainan kulit berupa bercak merah muda yang meluas dana berubah warna menjadi cokelat kehitaman lalu terkelupas | 0.25 |
| 10 | G10 | Sering disertai penyakit infeksi yang umumnya akut | 0.8235 |
| 11 | G11 | Anemia dan diare | 0.8235 |
| 12 | G12 | Badan Nampak sangat kurus seolah-olah tulang hanya terbungkus kulit | 0.9759 |
| 13 | G13 | Wajah seperti orang tua | 0.9529 |
| 14 | G14 | Kulit menjadi keriput | 0.9032 |
| 15 | G15 | Jaringan lemak subkutis sangat sedikit sampai tidak ada | 0.8448 |
| 16 | G16 | Perut cekung dan iga gambang | 0.8235 |
| 17 | G17 | Sering disertai penyakit infeksi (umumnya kronis berulang) | 0.8485 |
| 18 | G18 | Pembengkakan yang tidak mencolok | 0.3 |