# Supplementary File

Supplement to: Esa DF, Shatri H, Rumende CM, Susilo A, Maulahela H, Fauzi A, Simadibrata M. Validity and reliability of the Indonesian version of the 9-item Inflammatory Bowel Disease Questionnaire (IBDQ-9). Med J Indones. 2023;32(3):168–72. DOI:10.13181/mji.oa.236848

This file provides further information related to the study.

# Supplementary Information

|  |  |
| --- | --- |
| 9-item Inflammatory Bowel Disease Questionnaire (IBDQ-9) original version | 2 |
| Kuesioner IBDQ-9 versi Bahasa Indonesia (*Inflammatory Bowel Disease Questionnaire-9 Indonesian version*) | 4 |
|  |  |
| **Supplementary Figures** |  |
| **Figure S1.** The characteristics of answers: QoL of IBD patients with the Indonesian version of the IBDQ-9 | 7 |
|  |  |
| **Supplementary Tables** |  |
| **Table S1.** The result of pilot testing Indonesian version IBDQ-9 | 8 |
| **Table S2.** Correlation of the Indonesian version of IBDQ-9 with the Indonesian version of SF-36 | 8 |
| **Table S3.** Correlation of the Indonesian version of IBDQ-9 with the Indonesian version of SF-36 based on IBD diagnosis | 8 |
| **Table S4.** Characteristics of IBD patients' QoL score with the Indonesian version of the SF-36 | 9 |

**9-item Inflammatory Bowel Disease Questionnaire (IBDQ-9) original version**

*1. How frequent have your bowel movements been during the last 2 weeks?*

* *1. More frequent than they have ever been*
* *2. Extremely frequent*
* *3. Very frequent*
* *4. Moderate increase in frequency*
* *5. Some increase in frequency*
* *6. Slight increase in frequency*
* *7. No increase in frequency*

*2. How often has the feeling of fatigue or of being tired and worn out been a problem for you during the last 2 weeks?*

* *1. All of the time*
* *2. Most of the time*
* *3. A good bit of time*
* *4. Some of the time*
* *5. A little of the time*
* *6. Hardly any of time*
* *7. None of the time*

*3. How much energy have you had during the last 2 weeks?*

* *1. No energy at all*
* *2. Very little energy*
* *3. A little energy*
* *4. Some energy*
* *5. A moderate amount of energy*
* *6. A lot of energy*
* *7. Full of energy*

*4. How often during the last 2 weeks have you had to delay or cancel a social engagement because of your bowel problem?*

* *1. All of the time*
* *2. Most of the time*
* *3. A good bit of time*
* *4. Some of the time*
* *5. A little of the time*
* *6. Hardly any of time*
* *7. None of the time*

*5. How often during the last 2 weeks have you been troubled by cramps in your abdomen?*

* *1. All of the time*
* *2. Most of the time*
* *3. A good bit of time*
* *4. Some of the time*
* *5. A little of the time*
* *6. Hardly any of time*
* *7. None of the time*

*6. How often during the last 2 weeks have you felt generally unwell?*

* *1. All of the time*
* *2. Most of the time*
* *3. A good bit of time*
* *4. Some of the time*
* *5. A little of the time*
* *6. Hardly any of time*
* *7. None of the time*

*7. Overall, in the last 2 weeks, how much of a problem have you had with passing a large amount of gas?*

* *1. Full of problem*
* *2. A lot of problem*
* *3. A moderate amount of problem*
* *4. Some problem*
* *5. A little problem*
* *6. Very little problem*
* *7. No problem at all*

*8. How much of the time during the last 2 weeks have you been troubled by feeling nauseated or sick to your stomach?*

* *1. All of the time*
* *2. Most of the time*
* *3. A good bit of time*
* *4. Some of the time*
* *5. A little of the time*
* *6. Hardly any of time*
* *7. None of the time*

*9. How satisfied, happy, or pleased have you been with your personal life during the last 2 weeks?*

* *1. No satisfied at all*
* *2. Very little satisfied*
* *3. A little satisfied*
* *4. Some satisfied*
* *5. A moderate amount of satisfied*
* *6. A lot of satisfied*
* *7. Full of satisfied*

**Kuesioner IBDQ-9 versi Bahasa Indonesia**

**(*Inflammatory Bowel Disease Questionnaire-9* *Indonesian version*)**

Petunjuk Pengisian Kuesioner:

Jawablah semua pertanyaan. Beberapa pertanyaan tampak serupa tetapi sebenarnya berbeda. Silahkan untuk memanfaatkan waktu sebaik-baiknya untuk membaca dan menjawab pertanyaan dengan melingkari atau mencentang kotak yang sesuai dengan jawaban Anda.

IBDQ singkat ini mencakup sembilan pertanyaan berikut (IBDQ-9):

1. Seberapa sering Anda buang air besar selama 2 minggu terakhir?

* 1. Lebih sering dibandingkan sebelumnya
* 2. Amat sangat sering
* 3. Sangat sering
* 4. Frekuensi cukup meningkat
* 5. Frekuensi agak meningkat
* 6. Frekuensi sedikit meningkat
* 7. Frekuensi tidak meningkat

2. Seberapa sering perasaan letih atau lelah dan tidak bertenaga menjadi masalah bagi Anda selama 2 minggu terakhir?

* 1. Selalu
* 2. Hampir selalu
* 3. Sering
* 4. Kadang-kadang
* 5. Jarang
* 6. Hampir tidak pernah
* 7. Tidak pernah

3. Berapa banyak tenaga yang Anda miliki selama 2 minggu terakhir?

* 1. Tidak bertenaga sama sekali
* 2. Hampir tidak bertenaga
* 3. Sangat sedikit bertenaga
* 4. Sedikit bertenaga
* 5. Cukup bertenaga
* 6. Banyak tenaga
* 7. Penuh tenaga

4. Seberapa sering Anda harus menunda atau membatalkan keterlibatan sosial karena masalah usus Anda selama 2 minggu terakhir?

* 1. Selalu
* 2. Hampir selalu
* 3. Sering
* 4. Kadang-kadang
* 5. Jarang
* 6. Hampir tidak pernah
* 7. Tidak pernah

5. Seberapa sering Anda merasa terganggu oleh kram perut selama 2 minggu terakhir?

* 1. Selalu
* 2. Hampir selalu
* 3. Sering
* 4. Kadang-kadang
* 5. Jarang
* 6. Hampir tidak pernah
* 7. Tidak pernah

6. Seberapa sering Anda merasa kurang sehat selama 2 minggu terakhir?

* 1. Selalu
* 2. Hampir selalu
* 3. Sering
* 4. Kadang-kadang
* 5. Jarang
* 6. Hampir tidak pernah
* 7. Tidak pernah

7. Secara keseluruhan, seberapa banyak masalah yang Anda alami dalam buang angin selama 2 minggu terakhir?

* 1. Penuh masalah
* 2. Banyak masalah
* 3. Cukup masalah
* 4. Beberapa masalah
* 5. Sedikit masalah
* 6. Sangat sedikit masalah
* 7. Tidak ada masalah sama sekali

8. Berapa kali Anda merasa terganggu dengan rasa mual atau sakit perut selama 2 minggu terakhir?

* 1. Selalu
* 2. Hampir selalu
* 3. Sering
* 4. Kadang-kadang
* 5. Jarang
* 6. Hampir tidak pernah
* 7. Tidak pernah

9. Seberapa puas, bahagia, atau senangkah Anda dengan kehidupan pribadi Anda selama 2 minggu terakhir?

* 1. Tidak puas sama sekali
* 2. Hampir tidak puas
* 3. Sangat sedikit puas
* 4. Sedikit puas
* 5. Cukup puas
* 6. Puas
* 7. Sangat puas

**Figure S1.** The characteristics of answers: QoL of IBD patients with the Indonesian version of the IBDQ-9. IBD=inflammatory bowel disease; IBDQ-9=9-item Inflammatory Bowel Disease Questionnaire; QoL:quality of life

The results of pilot testing with the Indonesian version of the IBDQ-9 on 20 IBD patients obtained a Cronbach's alpha value of 0.903, which indicates that the Indonesian version of the IBDQ-9 has good internal consistency and can be used further for a larger research sample.

**Table S1.** The result of pilot testing Indonesian version IBDQ-9

|  |  |  |  |
| --- | --- | --- | --- |
| Question | Average | Value of Cronbach’s alpha | |
| General | If Qn is removed |
| Q1 | 34.45 | 0.903 | 0.933 |
| Q2 | 36.45 |  | 0.882 |
| Q3 | 35.40 |  | 0.890 |
| Q4 | 35.25 |  | 0.888 |
| Q5 | 35.20 |  | 0.891 |
| Q6 | 36.25 |  | 0.880 |
| Q7 | 35.05 |  | 0.893 |
| Q8 | 35.80 |  | 0.881 |
| Q9 | 35.35 |  | 0.889 |

IBDQ-9=9-item Inflammatory Bowel Disease Questionnaire

**Table S2.** Correlation of the Indonesian version of IBDQ-9 with the Indonesian version of SF-36

|  |  |  |
| --- | --- | --- |
|  | Correlation | Total score SF-36 |
| Total Score IBDQ-9 | rs | 0.769 |
|  | *p* | <0.001 |
|  | n | 124 |

IBDQ-9=9-item Inflammatory Bowel Disease Questionnaire; SF-36=36-item Short Form Health Survey

**Table S3.** Correlation of the Indonesian version of IBDQ-9 with the Indonesian version of SF-36 based on IBD diagnosis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Correlation | Total score IBDQ-9 | | |
| CD | UC | IC |
| Total score SF-36 | rs | 0.792 | 0.760 | 0.724 |
|  | *p* | <0.001 | <0.001 | <0.001 |
|  | n | 49 | 43 | 32 |

CD=Crohn's disease; IBDQ-9=9-item Inflammatory Bowel Disease Questionnaire; IC=indeterminate colitis; SF-36=36-item Short Form Health Survey; UC=ulcerative colitis

**Table S4.** Characteristics of IBD patients' QoL score with the Indonesian version of the SF-36

| Score | Average | Raw standard | Median | Min | Max |
| --- | --- | --- | --- | --- | --- |
| SF-1 | 32.06 | 20.55 | 25 | 0 | 100 |
| SF-2 | 59.07 | 30.30 | 50 | 0 | 100 |
| SF-3 | 65.12 | 28.84 | 75 | 0 | 100 |
| SF-4 | 55.65 | 29.71 | 50 | 0 | 100 |
| SF-5 | 40.52 | 26.01 | 25 | 0 | 100 |
| SF-6 | 49.60 | 27.23 | 25 | 0 | 100 |
| SF-7 | 29.03 | 34.39 | 0 | 0 | 100 |
| SF-8 | 48.79 | 37.43 | 50 | 0 | 100 |
| SF-9 | 59.68 | 35.51 | 50 | 0 | 100 |
| SF-10 | 57.26 | 37.01 | 50 | 0 | 100 |
| SF-11 | 66.94 | 34.86 | 50 | 0 | 100 |
| SF-12 | 61.29 | 35.41 | 50 | 0 | 100 |
| SF-13 | 50.81 | 37.17 | 50 | 0 | 100 |
| SF-14 | 70.97 | 34.39 | 100 | 0 | 100 |
| SF-15 | 76.61 | 32.78 | 100 | 0 | 100 |
| SF-16 | 86.69 | 28.59 | 100 | 0 | 100 |
| SF-17 | 33.87 | 47.52 | 0 | 0 | 100 |
| SF-18 | 26.61 | 44.37 | 0 | 0 | 100 |
| SF-19 | 25.00 | 43.48 | 0 | 0 | 100 |
| SF-20 | 34.68 | 47.79 | 0 | 0 | 100 |
| SF-21 | 31.45 | 46.62 | 0 | 0 | 100 |
| SF-22 | 30.65 | 46.29 | 0 | 0 | 100 |
| SF-23 | 29.84 | 45.94 | 0 | 0 | 100 |
| SF-24 | 46.13 | 24.75 | 40 | 0 | 100 |
| SF-25 | 53.23 | 27.10 | 40 | 0 | 100 |
| SF-26 | 51.61 | 29.42 | 40 | 0 | 100 |
| SF-27 | 43.06 | 27.83 | 40 | 0 | 100 |
| SF-28 | 52.10 | 26.23 | 40 | 0 | 100 |
| SF-29 | 57.74 | 29.32 | 60 | 0 | 100 |
| SF-30 | 60.00 | 29.63 | 60 | 0 | 100 |
| SF-31 | 61.77 | 28.97 | 60 | 0 | 100 |
| SF-32 | 53.06 | 28.29 | 60 | 0 | 100 |
| SF-33 | 41.94 | 27.28 | 40 | 0 | 100 |
| SF-34 | 50.20 | 26.96 | 50 | 0 | 100 |
| SF-35 | 34.48 | 27.90 | 25 | 0 | 100 |
| SF-36 | 57.06 | 27.16 | 50 | 0 | 100 |
| Total score | 49.57 | 17.84 | 46.53 | 8.33 | 90.69 |

IBD=inflammatory bowel disease; SF-36=36-item Short Form Health Survey; QoL=quality of life