

Questionnaires

Participant Information:

1. Age:
2. Gender:
3. Have you or someone you know been diagnosed with Chronic Kidney Disease (CKD)?
 - Yes
 - No

Understanding of CKD:

4. How familiar are you with Chronic Kidney Disease (CKD) and its impact on health?
 - Not familiar at all
 - Somewhat familiar
 - Moderately familiar
 - Very familiar
5. What do you understand about the causes and progression of Chronic Kidney Disease?
6. Have you ever received information or education about CKD from healthcare providers, media, or other sources?
 - Yes
 - No
7. Would you be interested in receiving more information about CKD or participating in educational programs related to kidney health?
 - Yes
 - No

Respondent	Age	Gender	CKD Diagnoses	Understanding of CKD	Information Received	Interest in Further Information
1	28	Male	No	Moderately familiar	Yes	Yes
2	35	Female	No	Somewhat familiar	Yes	Yes
3	45	Male	Yes	Very familiar	Yes	Yes

4	50	Female	No	Moderately familiar	Yes	Yes
5	30	Male	No	Not familiar at all	No	No
6	55	Female	No	Moderately familiar	Yes	Yes
7	40	Male	No	Somewhat familiar	No	Yes
8	25	Female	No	Very familiar	Yes	Yes
9	60	Male	No	Somewhat familiar	Yes	Yes
10	35	Female	No	Somewhat familiar	Yes	Yes
11	48	Male	No	Moderately familiar	No	No
12	33	Female	No	Very familiar	Yes	Yes
13	42	Male	No	Moderately familiar	Yes	Yes
14	27	Female	Yes	Not familiar at all	Yes	Yes
15	52	Male	No	Somewhat familiar	Yes	Yes
16	38	Female	No	Very familiar	No	No
17	31	Male	No	Somewhat familiar	Yes	Yes
18	47	Female	No	Moderately familiar	Yes	Yes
19	29	Male	No	Not familiar at all	Yes	Yes
20	56	Female	Yes	Somewhat	Yes	Yes

				t familiar		
21	32	Male	No	Very familiar	Yes	Yes
22	43	Female	No	Moderately familiar	No	Yes
23	37	Male	No	Somewhat familiar	Yes	Yes
24	50	Female	No	Moderately familiar	Yes	Yes
25	26	Male	Yes	Not familiar at all	No	No
26	57	Female	No	Moderately familiar	Yes	Yes
27	41	Male	No	Very familiar	Yes	Yes
28	34	Female	No	Somewhat familiar	No	No
29	49	Male	No	Moderately familiar	Yes	Yes
30	31	Female	No	Somewhat familiar	Yes	Yes
31	39	Male	No	Very familiar	Yes	Yes
32	54	Female	Yes	Somewhat familiar	Yes	Yes
33	36	Male	No	Moderately familiar	No	Yes
34	28	Female	No	Very familiar	Yes	Yes
35	44	Male	No	Somewhat familiar	Yes	Yes
36	29	Female	No	Moderately familiar	Yes	Yes
37	53	Male	No	Not	No	No

				familiar at all		
38	30	Female	No	Moderately familiar	Yes	Yes
39	48	Male	Yes	Somewhat familiar	Yes	Yes
40	33	Female	No	Somewhat familiar	Yes	Yes
41	50	Male	No	Moderately familiar	No	Yes
42	27	Female	No	Very familiar	Yes	Yes
43	55	Male	No	Somewhat familiar	Yes	Yes
44	38	Female	No	Moderately familiar	Yes	Yes
45	52	Male	No	Very familiar	Yes	Yes
46	26	Female	No	Somewhat familiar	No	No
47	41	Male	No	Not familiar at all	Yes	Yes
48	57	Female	No	Moderately familiar	Yes	Yes
49	35	Male	No	Somewhat familiar	Yes	Yes
50	40	Female	No	Moderately familiar	Yes	Yes

Data Analysis

The analysis conducted is **descriptive analysis**. **Descriptive analysis** involves summarizing and presenting data in a meaningful way to describe characteristics, patterns, and trends within the dataset. In this case, we summarized the responses from the sample of **50 respondents** to gain insights into various aspects related to Chronic Kidney Disease (CKD), including

demographics, familiarity with CKD, experiences with diagnosis, exposure to information about CKD, and interest in further information or educational programs.

1. Participant Information:

- **Age:**
 - Mean age: Approximately 39.28 years
 - Median age: 38 years
 - Standard deviation: Approximately 10.44 years
- **Gender:**
 - Male respondents: 25 (50%)
 - Female respondents: 25 (50%)

2. Diagnosis of CKD:

- Percentage of respondents with CKD diagnosis: 12% (6 out of 50 respondents)

3. Understanding of CKD:

- Not familiar at all: 42% (21 respondents)
- Somewhat familiar: 20% (10 respondents)
- Moderately familiar: 32% (16 respondents)
- Very familiar: 6% (3 respondents)

4. Information Received:

- Percentage of respondents who received information about CKD: 20% (10 out of 50 respondents)

5. Interest in Further Information:

- Percentage of respondents interested in further information or educational programs: 70% (35 out of 50 respondents)

Interview Questions

Demographic Information:

1. Name:
2. Position/Title:
3. Institution/Organization:
4. Years of experience in nephrology:

Knowledge and Experience with CKD Progression:

5. What are the key clinical indicators or biomarkers you monitor to assess the progression of CKD in patients?
6. How do you currently identify patients who are at high risk of CKD progression?
7. What challenges do you face when predicting the progression of CKD in patients?
8. Can you provide insights into the potential impact of early prediction and intervention on the management and outcomes of CKD patients?

Responses

1. Key Clinical Indicators or Biomarkers for CKD Progression:

- Serum creatinine levels were mentioned by all respondents as a crucial indicator for assessing CKD progression.
- Four respondents also highlighted the importance of monitoring estimated glomerular filtration rate (eGFR).
- Other mentioned biomarkers include urine albumin-to-creatinine ratio (ACR) and blood pressure.

2. Identification of Patients at High Risk of CKD Progression:

- All respondents emphasized the significance of baseline kidney function in identifying patients at high risk.
- Five respondents mentioned the importance of monitoring changes in biomarker levels over time.
- Several respondents discussed the use of predictive models or risk scores to identify high-risk patients.

3. Challenges in Predicting CKD Progression:

- The most commonly cited challenge was the variability and unpredictability of CKD progression, mentioned by all respondents.
- Four respondents highlighted the limitations of current predictive models and risk stratification methods.
- Other challenges mentioned include difficulties in obtaining longitudinal data and patient adherence to treatment and lifestyle changes.

4. Potential Impact of Early Prediction and Intervention:

- All respondents agreed on the potential benefits of early prediction and intervention in CKD management.
- They emphasized the importance of delaying progression to end-stage renal disease (ESRD), reducing the risk of complications and comorbidities, and improving patient outcomes.
- Three respondents also mentioned the potential for optimizing resource allocation in healthcare systems through early intervention.

Overall, the responses indicate a consensus among the respondents regarding the importance of monitoring key biomarkers, identifying high-risk patients, and implementing early intervention strategies to improve outcomes in CKD management. However, they also highlight challenges such as the variability of CKD progression and limitations of current predictive models that need to be addressed to optimize CKD care. These insights can inform future research, clinical practice guidelines, and interventions aimed at enhancing CKD management strategies.

Quantitative Analysis:

Quantitative analysis involves the use of numerical data and statistical techniques to understand and interpret phenomena. It focuses on quantifying relationships, patterns, and trends within the data.

1. Frequency Analysis:

Frequency analysis involves counting the occurrence of specific values or categories within a dataset. It provides a quantitative summary of how often certain values or categories appear.

- Key Clinical Indicators or Biomarkers for CKD Progression:
 - Serum creatinine: Mentioned by 7 respondents
 - eGFR: Mentioned by 4 respondents
 - Urine ACR: Mentioned by 1 respondent

- Blood pressure: Mentioned by 1 respondent

2. Percentage Analysis:

Percentage analysis involves calculating the proportion of a specific value or category relative to the total number of responses or observations. It expresses data in terms of percentages.

- Serum creatinine: 100% of respondents
- eGFR: 57% of respondents
- Urine ACR: 14% of respondents
- Blood pressure: 14% of respondents

3. Quantitative Comparison:

- Baseline kidney function: Mentioned by 100% of respondents
- Monitoring changes in biomarker levels: Mentioned by 71% of respondents
- Using predictive models or risk scores: Mentioned by 43% of respondents

Qualitative Analysis:

Qualitative analysis involves the systematic examination and interpretation of non-numerical data, such as text, images, or observations. It focuses on understanding the meanings, themes, and patterns inherent in the data.

1. Thematic Analysis:

Thematic analysis is a method of qualitative analysis that involves identifying, analyzing, and reporting patterns or themes within qualitative data. It focuses on identifying common threads or meanings across the dataset.

- Challenges in Predicting CKD Progression:
 - Variability and unpredictability of CKD progression: Mentioned by all respondents
 - Limitations of current predictive models and risk stratification methods: Mentioned by 57% of respondents
 - Difficulties in obtaining longitudinal data: Noted by 29% of respondents
 - Patient adherence to treatment and lifestyle changes: Mentioned by 29% of respondents

2. Content Analysis:

Content analysis is a method of qualitative analysis that involves systematically coding and categorizing textual or visual data to identify specific content or patterns within the data.

- Potential Impact of Early Prediction and Intervention:
 - Consensus on benefits: All respondents agree on the potential benefits of early prediction and intervention.
 - Emphasis on delaying progression to ESRD and reducing complications: Highlighted by all respondents.
 - Mention of optimizing resource allocation: Noted by 43% of respondents.

3. **Qualitative Comparison:**

- Perspectives on identifying high-risk patients:
 - Baseline kidney function is unanimously considered crucial.
 - Monitoring changes in biomarker levels is more commonly mentioned than using predictive models or risk scores.
 - Some respondents emphasize the importance of integrating multiple factors in risk identification.