Research Methodologies in Healthcare

Course Project: Problem Statement

Case Scenario

ABC, a multi-specialty hospital, is located in Bhopal. The 100-bed hospital caters to various specialties such as gynaecology, orthopaedics, neurology and cardiology. Each ward has its own set of nurses (who have specialised skills to work in the department they are a part of).

Lately, ABC has been facing a shortage of nurses. To counter this, it is trying various methods to retain its nursing staff. However, they have not been able to come up witha concrete solution to this problem.

Suppose you are the healthcare manager of ABC. The senior management has asked you to solve this problem of attrition of nursing staff by focusing on the following business objectives:

1. Identify the reasons behind nurse attrition rate in the hospital.
2. Determine the practices that the management would need to focus on to retain the nursing staff in the hospital.

Based on the objectives given, you determine the type of research methodology to be used is a mixed method. For this, you will first use the qualitative approach followed by the quantitative approach.

Questions
Qualitative research

Q I. Based on the scenario and the business problem, identify the sample composition to conduct a qualitative study. Explain the reason for your answer. **(5 marks)**

Q II. Which data collection method would be most appropriate for the selected sample groups? Provide sufficient reasons for your answer. **(5 marks)**

Q III. Design a discussion guide that consists of the following **(12 marks)**:
   - Questions that explore the possible impact of work environment on the nurses
   - Questions that investigate possible reasons for high nurse turnover
   - Questions that probe the participant on discussing the internal and external challenges they face at the workplace
   - Questions that provide a direction for the healthy work practices that the nurses demand but are not currently getting

Quantitative Research

The qualitative research exercise conducted by the hospital provided key insights about the critical parameters that led to the nurses expressing the desire to leave the hospital. These parameters were as follows:

1. Compensation
2. Work-life balance
3. Compensation for overtime work
4. Recognition for the work being performed
5. Working relationship with team members, including senior nurses and doctors
6. Regular in-service education and training for self-development
7. Respect and fairness at work

The hospital management then conducted a quantitative research exercise to assess the weightage of the above-listed parameters and ascertain how the nursing staff can be retained in the hospital for a longer duration.

As part of the quantitative research exercise, the staff nurses of the hospital were asked the following set of questions to determine the weightage given by them to the most critical parameters.

Q.1 As part of your role and experience in the hospital, what is your level of satisfaction across the following parameters? Rate on a scale of 1 (extremely unlikely) to 5 (extremely likely).

1. Compensation
2. Work-life balance
3. Additional compensation for overtime work
4. Recognition for the work being performed
5. Working relationship with team, including senior nurses and doctors
6. Regular in-service education and training for self-development
7. Supportive and understanding management
8. Respect and fairness at work

Q.2 Considering your current experience with the hospital, how long would you like to continue working here?

1. Less than 6 months
2. 6 to 12 months
3. 12 to 24 months
4. More than 24 months

Questions 3, 4 and 5 were asked to the respondents who chose the first three options and hence exhibited signs of leaving the hospital in the next few months.

Q.3 How likely are you to continue working with ABC Hospital if your senior nurse and doctors were more receptive to your feedback? Rate on a scale of 1 (extremely unlikely) to 5 (extremely likely).

1. Extremely unlikely
2. Unlikely
3. Neutral
4. Likely
5. Extremely likely

Q.4 How likely are you to continue working with ABC Hospital if your work shifts were made shorter? Rate on a scale of 1 (extremely unlikely) to 5 (extremely likely).

1. Extremely unlikely
2. Unlikely
3. Neutral
4. Likely
5. Extremely likely

Q.5 If you were to obtain a salary hike of 10%, would you continue working with ABC Hospital for a longer duration?

1. Yes
2. No

Q.6 Please rank the following parameters based on their level of importance in determining whether you will continue working with ABC Hospital.

1. Compensation
2. Work-life balance
3. Additional compensation for overtime work
4. Recognition for the work being performed
5. Working relationship with team members, including senior nurses and doctors
6. Regular in-service education and training for self-development
7. Respect and fairness at work
8. Supportive and understanding management

The data related to the responses for the above-given questions of the quantitative research can be found in the downloadable document given below.

As a healthcare manager at ABC Hospital, interpret the data collected from the questions of the quantitative research exercises and make recommendations to reduce the high attrition of staff nurses at the hospital.

Q I. In terms of percentage value, for which of the seven listed parameters were the nurses' satisfaction level the highest (ratings 4 and 5)? **(2 marks)**

Q II. Demonstrate the satisfaction level of the staff nurses across the key parameters with the help of a stacked bar graph. **(4 marks)**

Q III. Determine the percentage of nurses/respondents willing or unwilling to stay in the hospital, based on their responses in questions 3, 4 and 5.
- Question 3 (**1,2 and 3** - Not willing) (**4 and 5** - Willing)
- Question 4 (**1,2 and 3** - Not willing) (**4 and 5** - Willing)
- Question 5 (**Yes** - Willing) (**No** - Not willing)

Present the data for each of these questions using a visualisation tool for the interpreted data of each question. **(6 marks)**

Q IV. Interpret the data collected for Q6 for the priority given to each of the parameters. Present the data using a visualisation tool. Based on your interpretation of the data, make three key recommendations to the hospital management that will help retain the nursing staff in the hospital. **(6 marks)**