Infectious Disease and Environmental Risks Among Migrant Farmworkers

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Part III

Materials And Methods

This study is a preliminary study based on an analysis of qualitative research in nature. In this survey, the number of infectious diseases, infectious diseases and environmental disasters of migrant and seasonal farmworkers (MSFWs) is calculated. To collect data, researchers use interview methods and meet personally with survey respondents. The authors maintained the goals stated in the questionnaire question. As a technology for work, a multivariate regression model will be developed that will be used to evaluate whether a goal will be achieved. For each variable, I will use the primary data as a tool of the relevant verification tool. This section provides a brief explanation of collecting preliminary data and developing research and methodology. It allows me to data collection, analysis and interpretation the results at a later stage.

Theoretical Support

For limited resources, households suffer from “insufficient or uncertain access to food or insufficient ability to receive acceptable food in a socially acceptable manner.” It is thought that food is not abundant. Hunger, a more serious form of food shortage, occurs when families begin to skip meals due to a lack of food or reduced food intake. The latest development of criteria tool for US food security in the United States. The comparison between the group and the food security group of the population group in the United States has improved greatly (Weigel, Armijos, Hall, Ramirez, & Orozco, 2007).

Systems Theory seems to be the theoretical basis for assessment within the MSFW population; generally speaking, the healthcare sector is confronting both risks and uncertainties. Change in healthcare patterns is the reflection of uncertainty (Wilk, 1986). The probability of occurrence of which cannot be measured given the fact that workers as transmitters would rationally use the resources for any dangerous change in disease patterns. Statistical and econometric methods are engaged to ascertain a rational connection between the rate of infections, communicable diseases and the environment. Multiple regression techniques have been widely utilized to approximate the shock of variables on migrant and seasonal farmworkers (MSFWs). The econometric approaches rely on reduced-form statistical association between output and input. Regressing MSFWs against

numbers of infections, communicable diseases and environmental hazards measured the giving of every single aspect to the result and projected the effects of long-standing changes in the healthcare segment. A generous magnitude of inquiries has been performed on the probable impacts of the numbers of infections, communicable diseases and environmental hazards on MSFWs (Sakala, 1987). Up-to-date models have been formulated by researchers in diverse fields,' i.e., healthcare studies and economics, to scheme future impact.

Emerging evidence suggests chronic household food insecurity hurts health.

According to new evidence, chronic food insecurity in the home is detrimental to health. This study examined the prevalence, predictive and health effects of diseases associated with the lack of food security of 100 immigrant families and seasonal agricultural workers living on the US border. America and Mexico (Weigel, Armijos, Hall, Ramirez, & Orozco, 2007). Data was collected using US food safety measures. Ku reviewed the health status of California's agricultural workers and the subject of artificial, clinical and biochemical indicators. Eighty percent of families suffer from food insecurity, and 49% are hungry. The lack of home food security has foreseen that young children's home and mothers' education is low. Unsafe households are likely to have at least one member who suffers from symptoms of depressive symptoms (depression), neurosis (peculiar ethnic disorder), learning disorders and intestinal infections. They are not directly related to the lack of food security, but obesity, obesity of the central body, hypertension, and changes in lipids and blood glucose levels were common. These findings highlight the important health and food security challenges faced by MSF families in border areas (Weigel et al., 2007).

Empirical Framework

The structural models are interdisciplinary, connecting models from science, the healthcare sector, and economics. It initiates with simulation models (Poss, 2000). The migrant and seasonal farm workers (MSFWs) insert parameters drawn from primary data. After measuring a number of infections, communicable diseases and environmental hazards in MSFWs, results estimates are then integrated into economic models (Pesaran, Shin, & Smith, 2001). The benefit of the approach is that it endows with a comprehensive consideration of the physical and economic responses, and adjustments.

Objectives Of The Research

The objectives of the study undertaken are as under:

- To actualize a response to the physical health and social needs of the MSFW population
- To facilitate access to physical health and social service needs of the MSFW population
- To administer linguistically and culturally relevant health education to MSFWs and their families

- To furnish preventive and primary care to the MSFW population.

Research Design

The process of data collection, analysis and interpretation is called a research project. It allows the author to establish a random relationship related to the logical interface between the variables being examined. The design of this study also determines the generalization domain.

(Lievens, Sanchez, Bartram, & Brown, 2010). In a recent study specializing in descriptive research, the developed project is used. It is a broadly deterministic research project used in social science when data is based on research. The data collected during the investigation is used to evaluate the relationship between variables (Poss, 2000). Qualitative data will be used using more appropriate and detailed estimates and other variables hidden during analysis. The data gathered by the detailed interview is very important and provides more useful and accurate information at a limited time with minimal cost.

Population For The Study

The present research has been done in Oswego County of the United States constitutes the population for the study undertaken.

Sampling

Sampling means the selection of a population as a representative of the entire population or any part of society (Goldschmidt-Clermont et al., 1992). In general, the large population is a small sample size of the proportion of this population, and vice versa. The total population is very small, and the required sample size must be large enough to be fully represented by the entire population. With larger samples, the author can get more accurate and accurate results for predictions with a bitter taste of small samples.

Approximately 80 participants from various regions of Oswego County in the United States will be chosen from different views, including migrant workers and seasonal workers. Eighty people are selected from migrant workers and seasonal agricultural workers who meet the criteria of research.

Sampling Technique

For the selection of the sample, the Simple Random Sampling technique has been employed in the research undertaken. The Sample size is calculated from the formula as given under:

$n=N/1+Ne2$

n=100/1+100(0.05) (0.05)

n=100/1+100*(0.0025)

n=100/1+0.25

n=100/1.25

n=80

Instrumentation/Questionnaire

The questionnaire that has been used in the study is comprised of three parts. In the first section, the questions relating to the demographics and personal information of the participants have been asked. In the second segment, the closed-ended questions were asked based on a scale of 0 to 5. In the last part of the questionnaire, the open-ended questions have been asked of every respondent individually.

Management Competency Skills by *(Dierdorff, T. C 2009)*

The adopted scale of management competency skills proposed by Dierdorff, T. C (2009) will be used in the study. It is a five-point Likert scale ranging from 1- Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree.

Conducting Survey

The current research will be conducted in 2018. The author first visited respondents before visiting the data collection to obtain the appointment of respondents to ensure availability at the time of the survey for current research participants. At the time of the initial visit, researchers asked participants oral questions and selected Oswego County in the US to conduct a detailed interview. Data from New York migrant workers and seasonal labor seasons help researchers attract participants. To go to the state, the author arranged his transport.

Edition Of The Data

After the interview, researchers compiled the data collected on the same day to ensure the correctness, completeness, and integrity of the data. It was done to ensure proper data collection, as it was impossible to think of the same respondents for the same purpose. The data was put in the computer according to the results. To ensure the accuracy of the data, researchers avoid personal mistakes in calculating the data collected in the computer to clear the data from the low probability opportunity to test the coding system for each question. As a result, the data is also stored on the

hard disk or USB for later use, i.e. (data analysis).

Coding, Editing And Data Entry

After eliminating possible errors and recording all variables after missing, that class was encoded by different alphabets and numerical methods for researchers in data analysis. After each variable is coded and classified, complete information is entered in SPSS (Software Package for Social Science). SPSS is a program widely used for social science analysis purposes. This program can use various statistical tools. It is also useful for deciphering variables and adding or deleting existing variables.

Data Analysis

Fouché & Delport (2005) considered the parallel analysis of the results by interpreting the data and the results obtained after analysis. It is almost impossible to evaluate the result of preliminary data before encryption. Each of the results of the analysis should be done after the collected data and the correct interpretation, respectively, to get bigger results. Data analysis will provide coding, ranking, and final results and help answer researchers' questions. After analysis, interpretation establishes meaningful relationships, brings strong results, and leads to policy recommendations. In the current survey, the data is collected on a Microsoft Excel sheet and coded in the SPSS sheet for analysis. It is a qualitative study, encoding the data before transferring it to the SPSS sheet. Several regression methods are used for analytical purposes.

ADF Unit Root Test

To avoid spurious regression, we first run the ADF unit root test on the original data to test the stationary. The author will use SPSS for the estimation of the statistical results. The ADF test result is summarized to test the stationarity. Because all the variables are integrated, the author can build a regression model to test their cointegration.

The Multiple Regression Model Approach

The multiple regression models have been used to investigate the empirical relationship between the number of dependents and independent variables of interest; It calculates the strength of the relationship among variables. The model was developed by Persaran *et al.* (2001). The specific model has been designed to estimate the number of infections, communicable diseases and environmental hazards in migrant and seasonal farmworkers (MSFWs) in the United States. In the study Y will be the dependent variable along with the X1, X2, X3, and X4 are independent variables, is the error term. Likewise, shows the intercept of the model along with them, and is the slope of X1, X2, and X3, respectively.

General Form Of Multiple Regression Model

Multiple regression tools are a powerful concept that permitted us to explain the existence of a significant relationship between the dependent and independent variables. Multiple regression models aim to estimate the equation as under:

Econometric Form Of Model

The econometric form of multiple regression models encounters each independent variable along with an independent variable to estimate the significant relationship among them.

Ethical Approval

The researcher will take the informed consent form from his/her respondents, which will consist of the following points.

- It will be approved by the Ethical Committee of the New York before the study.
- All information and collected data will be kept confidential.
- Respondents/ Participants of the study will remain anonymous throughout the study.
- The subject will be informed that there will be no disadvantages or risks in the procedure of the study.
- They will also be informed that they will be free to withdraw at any time during the data collection procedure.
- The data collected for this study will not be used for any other study/organization.
- All the data and personal information will be discarded once the research study is completed.

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