Why does poverty cause high rates in dementia in Africa Americans in South Carolina?

Your Name (First M. Last)

School or Institution Name (University at Place or Town, State)

**Abstract:**

This research proposal presents a discussion on how poverty is causing health issues for African Americans who are living in South Carolina. It includes a detailed description of how poverty is increasing health issues and risks that are linked with health problems along with becoming both the causal factor and consequences of bad mental health. Poverty is one of the main reasons that people living in not-so well-developed areas such as South Carolina are facing. In this discussion, there is much evidence that is being taken by experimenters that supports the point that poverty is causing drastic effects on the mental health of people living in these areas (Albright,et,al,2019). There are many suggestions for the authorities as well how they could overcome this issue of poverty in order to save African Americans of South Carolina. There comes great responsibility on government and leadership so that they could make such policies that would be beneficial for people living in South Carolina.

**Prologue:**

Poverty is one of the major causes of ill mental health along with acting as a barrier when a person wanted to have health care services. It is a financial relationship as it has been seen that usually poor people cannot afford treatments that they need for keeping them mentally healthy and sound. There is a need of enough quantity of food so that the nutritional needs could be fulfilled (Bennett,et,al,2012). It would be wrong to say that there is just one link between poverty and critical mental health, as it has been seen that there are many other factors that play significant role in causing server mental health issues for poor people especially in areas like South Carolina where people don’t have many resources so that they could fulfill their daily nutritional needs. There could be seen a regular increase in the rate of the people who are becoming victims of dementia in South Carolina.

There have been presented many reports by the government departments on the issue of mental health that is continuously increasing in South Carolina (Wooten,et,al,2019). Demographic data of this area also supports the hypothesis that has been presented about the ever-increasing crisis of mental health that is getting out hand, mainly because of the nutritional deficiency that is not letting people, meet nutritional demand of their bodies that must be fulfilled for making them mentally healthy. South Carolina is the area where poverty rate shows that the inability of people for getting proper food. From many researchers, it could be seen that harsh life experiences appear in the lives of African Americans who live in South Carolina, vulnerable to Alzheimer and many other forms of mental health issues (Clarke,et,al,2018). Poverty is the leading cause because of which African Americans of South Carolina are likely twice at the risk of developing diseases like dementia. Genetic factors should not be brought in the limelight as there is no or minimal impact of genetic factors on mental health issues. Poverty is causing many mental health issues, and there are various factors such as nutritional deficiency as the main factor that inculcates mental health issues, but there are many other factors as well, such as depression and anxiety that are becoming more common in poor people that are leading them towards dementia.

Primary purpose of this study is to find out a relation between poverty and how it causes mental health issues in African Americans who are living in areas that are notorious for lacking the basic needs of people especially nutritional needs. Primary purpose of this study is to reveal causes and factors that increase rates of depression in people that are making them mentally ill. This study shows that rich people are likely at less risk of becoming victim of dementia (Clay,et,al,2019). Mental health is closely associated with poverty, as poor African Americans, living in South Carolina are facing more mental issues like depression, post-traumatic stress disorder and other wide range of diseases of mental health (Racic,et,al,2006). Serious challenges are linked with factors such as living below the poverty line and dealing with mental health problems. Lack of money leads towards making poor decisions as poverty also imposes a load that saps attention of people and reduces their efficiency of making good decisions. It has been seen that mostly poor people behave in the least capable ways when it comes to make a sensible decisions.

**Variables: (dependent and independent variables form journals 1, 2 and 3)**

Variables are the factors that could be manipulated and studied, in a research. In this study variables deal with looking at the relationships that exist between poverty and how it is affecting mental health of people living below the poverty line such as people living in South Carolina are facing mental illness because of their bad socioeconomic conditions (Costello,et,al,2001). There are two types of variables that we are going to look at and these are dependent and independent variables.

**Dependent variable of the study:**

* Nursing home placement for each of the client was determined during this study separately. Clients, who were waiting for being placed in the nursing home, were considered institutional and all the clients in the CLTC system remained active and they would be placed in different nursing home run for the same study.
* According to another journal, there could be other dependent variables as well, such as the individuals who would be taken as a sample.
* Medical history of participants would also serve as dependent variable in this research study (Manly,et,al,2003).

**Independent variables of the study:**

* Decline in the performance of daily life activities, including movement from one to another room was searched from baseline to last assessment and all the changes in continence from baseline till last assessment were determined too. Ability to perform five basic items that included transfer from bed to chair, use of toilet, dressing, eating and bathing was rated from 0-2 where 0 represented no assistance while 2 represented total dependence (Mehra,et,al,2019). Seven IADL items (telephone use, medicines, meal preparation, shopping, housework, transportation, and financial management) were also taken under consideration. It was seen that continence was rated as 0 if the client was continent, 1 if he/she is partially continent and rate would be 2 if he/she is continent (Lund,et,al,2010). Change in the status of functional health would be taken by considering scores from baseline to last assessment. .

 In the end, it was seen that the resulting variables were not continuous but categorical and that's why they were not converted into rates of the change over the period of follow-ups. Variables were categorized into two categories such as 1 will present zero improvement inability, while on the other hand 2 shows a decline in the ability of the clients (Karoly,et,al,2019). Some main variables must be taken into consideration, and these are, measure of the behavior of clients, demographic facts of clients and caregivers, medical history of the client and difference of time between follow up and assessment.

* From the perspective of other researchers, there could be other independent variables as age, gender, lifestyle and socioeconomic conditions of people who would be taken as the sample.
* According to another journal, there could be seen other independent variable, and that is opportunities available in South Carolina to African Americans.

**Statistical methods:**

Bivariate associations between the confounders, independent variables, and institutionalization all were evaluated by using SAS PROC FREQ (software) for doing the categorization of the independent variables. For continuous variables, different software such as SAS PROC UNIVARIATE was used (DeMaria,et,al,2019). Evaluation was done by using t-test and chi-square statistic. Multiple logistic regressions used to be performed for evaluating what would be the effect of independent variables on institutionalization.

**Categorical variables associated with the institutionalization, South Carolina Community Long-term care of clients with dementia**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Institutionalization  |  |  |
|  |  |  |  |  |
| Variables | **N=724** | **%** | **N=62** | **%** |
| Change in ADL |  |  |  |  |
| NO improve  | **575** | **95** | **33** | **5** |
| decline | **149** | **84** | **29** |  **16** |
| Change in locomotion  |  |  |  |  |
| No  | **649** | **93** | **49** | **7** |
| Decline | **75** | **85** | **13** |  **15** |
| Relation of caregiver and client |  |  |  |  |
| Spouse | **103** | **97** | **3** | **3** |
| child | **434** | **90** | **48** |  **10** |
| Another relative | **165** | **97** | **5** | **3** |
| No relation | **22** | **79** | **6** |  **21** |
| Client ethnicity |  |  |  |  |
| African American | **470** | **96** | **22** | **4** |
| white | **254** | **86** | **40** |  **14** |
| Dementia etiology |  |  |  |  |
| AD | **186** | **87** | **29** |  **13** |
| MD | **209** | **95** | **10** | **5** |
| Other dementia | **329** | **93** | **23** | **7** |
|  |  |  |  |  |
|  |  |  |  |  |

**Hypothesis:**

* Does poverty contribute to the increased rate of dementia in South Carolina?
* Dementia is a precursor to high poverty rates.

**Research question:**

Why does poverty cause high rates in dementia in African Americans in South Carolina?

**Background and literature review:**

 This report summarizes a literature review that examines the relationship between poverty and mental illness (dementia). We have examined various things while doing this research such as the strength of the association that exists between the factors of poverty and mental health of people living in South Carolina. Also, an in-depth analysis has been done of the variables that were involved in measuring this association (Glymour,et,al,2011). Relation between the two main subjects cannot be negated, and effects would be seen easily that would cast unhealthy effects on the overall society. There is a strong association between poverty and mental health that could be measured by taking a look at the difficulties of people by studying circumstances in both ways longitudinal or cross-sectional (Wray,et,al,2019). According to various scholars, there are some main factors that would have severe impacts on making this kind of situation worst, and these factors are, inadequate access to the health care centers, no support from neighbors, insufficient educational opportunities, inadequate supervision and close association with deviant peers, etc.

**Two threats to the internal validity of the study design:**

* **Rigorousness**

It is the ambiguity in the research study as things that are not clear during any research would act as a great threat to internal validity.

* **Instrumentation**

Results greatly depend on the correctness of instruments that are going to be used in any study. There could be many errors in instruments that would be used in this research, so instruments with error would be an internal threat to the validity of the study design.

**Two threats to the external validity of the study design:**

* **Situation**

Situation in which research is going to be taken would greatly affect the study. Effects of situation cannot be denied on the overall study and would also affect the result at the end.

* **Pre-test effects**

There are many tests that researchers used to do before any study and that may have a negative impact on the study as a whole.

**Method:**

**Study design and sample:**

All the clients (African Americans) of CLTC program in South Carolina were diagnosed with dementia. There has been taken an informed consent from the participants along with the legal authority of the client. Data that has been provided/ reported to the registry includes various things such as demographic characteristics, information obtained from the assessment that is carried out by CLTC nurses along with the service plan information assessment that social workers have obtained. Client's health status and functional ability report were taken after six months. There were 1600; CLTC clients who were reported to have dementia but clients enrolled for less than six months were having one report in records.

Then there were 1140 clients about whom there was a record and these participants were having two assessments during the period that got an approval for this study. Clients who died during this research were excluded (n=53) and clients who did not meet the criteria of enrollment (n=7) were released to care other than nursing home (n=14), clients whose data was missing in records (n=4), locomotion (n=4) and then comes ethnicity at the end for nurses who were keeping their record. It has been seen that decline in functional ability was one of the major risk factors of interest. Clients who were dependent in IADLs at the baseline were also excluded (n=277) that resulted in the final sample size that was 786.

**Ethical concerns:**

This fact cannot be denied that while doing any research, the researchers have to take care of ethics and moral values. Before starting the research or gathering any information from the participants, their consent should be taken, and they should be informed beforehand about research that you are going to carry on. It is the ethical right of the participants to know all the necessary facts about the research; they are going to be a part of. Dignity of participants is the first thing that should be protected in any research (Jamieson,et,al,2019). Privacy and confidentiality of the participants should not be compromised. Things should not be imposed on participants, and only relevant things should be asked. Personal questions should be avoided as it may hurt the participants and may lower cooperation from the side of participants. One of the main ethical concerns is that participants should be given freedom so that they could share whatever they want to. They should not be pressurized for showing their agreement with things proposed in the research.

**Conclusion:**

From the overall study, it has been seen that most of the African Americans in South Carolina are living below the poverty line and are unable to meet their nutritional needs. Not only the factor of nutritional deficiency should be solely blamed, but there are other major factors as well that are contributing a lot in making the situation worst. As it has been seen that poor people face more critical situations and are at the risk of becoming patients of depression (Juckett,et,al,2019). It won't be wrong to say that public health strategies that are being made for battling against dementia are becoming more common and useful for poor African Americans, living in South Carolina. From this research, it could be concluded that for savting people of South Carolina from dementia and other mental health issues, socioeconomic gaps should be reduced.

Out of 786, there were only 62 (8%) participants who got an entry to the nursing home. Means of IADL score was 11.5 for both groups that indicated a high percentage of impairment starting from the baseline. Only a few clients experienced a change in the score of IADL, and the same percentage of clients faced behavior troublesome as well (Porter,et,al,2019). Table of categorical variables was tested by chi-square test. It has been seen that those variables which are attached with increased odds of institutionalization were indicating a decline of performance.

**Summary discussion of approach:**

1. The sample is large enough as we could see that nurses took almost all the individuals of that area under observation and after all the clearance there were almost 750+ participants for deriving the final results.
2. The sample represents the target population as people who were selected for this research were from South Carolina that was the target area of this study.
3. Setting was appropriate for one study as clients who were selected after the final testing were taken to the nursing home, where they would be kept under suitable setting that would support one study.

**Data collection techniques:**

For collecting this data, the analytical and observational approach was used as it could be seen that clients (people of South Carolina) were selected and data were collected by the nurses after examining clients of CLTC program (Crouch,et,al,2018).

**Data collection process:**

Data has been collected by applying the process of interview as it could be seen that nurses obtained necessary information from clients and then pass that information to the registry (Mainouset,al,2005).

**Strengthens of the Data Approach:**

1. In this approach of collecting data, suitable numbers of participants could be chosen. This fact cannot be denied that there are huge numbers of African Americans who live in South Carolina.
2. There would be not much difference in circumstances that the participants would be facing (Juckett,et,al,2019). It has been seen that when there exists little difference in the overall conditions of the selected participates, it strengthens process that the researchers carry out.

**Limitations of the Data Approach:**

1. There would be no diversity or variety in the data collected as people of the same region would be investigated in this approach of data collection.
2. Nurses and researchers have to rely on the data collected from the participants even if they are giving facts or not.

**Summary discussion of approach:**

1. For this study, the data collection procedure is appropriate as it could be seen that taking direct views would be the best thing as we want to see effects of poverty on the mental health of participants (African Americans).
2. Appropriate steps, taken for protecting the rights of subjects include, taking consent of participants and then passing them through many tests and selecting only those who were completely ready for this research study.

**Additional part:**

**Poverty:**

It is defined as scarcity of lack of basic amount of material that one needs for spending peaceful life (Scott,et,al,1997). It is a multifaceted concept in which economic, social and political factors are involved. Poverty exists when people lack means and sources to satisfy their basic needs of life.

**Dementia:**

Dementia is defined as the decline in the mental ability which caused loss of cognitive functioning (remembering, reasoning). The decline in thinking skills occurs in such a way that directly affects a person’s ability to perform daily life activities.

**Stats of people living in poverty in South Carolina:**

According to the latest reports, the overall population is 4882720 out of which the number of people living in poverty is 751907. In another way, it could be said that the population is 4.96 M and the poverty rate is 15.3%



**Statistics of people with dementia in South Carolina:**

According to the reports, Alzheimer is the 6th leading cause of the death for the middle-class population in South Carolina and 2453 people of the middle class become the victim of dementia according to the latest reports. There has been seen an increase of 181% in death since 2000.

Reference:

Albright, D. L., Godfrey, K., McDaniel, J. T., Fletcher, K. L., Thomas, K. H., Bertram, J., ... & Stephens, T. M. (2019). Oral health among student veterans: Effects on mental and physical health. *Journal of American College Health*, 1-8.

Bennett, K. J., Probst, J. C., Vyavaharkar, M., & Glover, S. H. (2012). Lower rehospitalization rates among rural Medicare beneficiaries with diabetes. *The Journal of Rural Health*, *28*(3), 227-234.

Clarke, T. S. (2018). The Effects of Food Security on Socioeconomic Mobility in the United States: A Case Study in Allendale County, South Carolina.

Clay, K., Schmick, E., & Troesken, W. (2019). The rise and fall of pellagra in the American South. *The Journal of Economic History*, *79*(1), 32-62.

Costello, E. J., Keeler, G. P., & Angold, A. (2001). Poverty, race/ethnicity, and psychiatric disorder: A study of rural children. *American Journal of Public Health*, *91*(9), 1494-1498.

DeMaria, A. L., Sundstrom, B., Ferrara, M., Meier, S., & Higa, M. (2019). Fulfilling the Promise of Telemedicine: A Case Study of South Carolina. *Health Behavior and Policy Review*, *6*(2), 140-151.

Glymour, M. M., Kosheleva, A., Wadley, V. G., Weiss, C., & Manly, J. J. (2011). The geographic distribution of dementia mortality: elevated mortality rates for black and white Americans by place of birth. *Alzheimer disease and associated disorders*, *25*(3), 196.

Jamieson, S., Swickard, S. M., Cahill, A. L., Powell, S. S., Samuels, K., & Hartos, J. L. (2019). Does Mental Health Differ by Ethnicity and Income in Middle-Aged Females?.

Juckett, L. A., & Robinson, M. L. (2019). The Occupational Therapy Approach to Addressing Food Insecurity among Older Adults with Chronic Disease. *Geriatrics*, *4*(1), 22.

Karoly, L. A., & Gomez, C. J. (2019). Cost Analysis of the South Carolina Child Early Reading and Development Education Program.

Lund, C., Breen, A., Fisher, A. J., Kakuma, R., Corrigall, J., Joska, J. A., ... & Patel, V. (2010). Poverty and common mental disorders in low and middle-income countries: a systematic review. *Social science & medicine*, *71*(3), 517-528.

Mainous III, A. G., Eschenbach, S. L., Wells, B. J., Everett, C. J., & Gill, J. M. (2005). Cholesterol, transferrin saturation, and the development of dementia and Alzheimer’s disease: results from an 18-year population-based cohort. *Fam Med*, *37*(1), 36-42.

Manly, J. J., Touradji, P., Tang, M. X., & Stern, Y. (2003). Literacy and memory decline among ethnically diverse elders. *Journal of clinical and experimental neuropsychology*, *25*(5), 680-690.

Mehra, R., Shebl, F. M., Cunningham, S. D., Magriples, U., Barrette, E., Herrera, C., ... & Ickovics, J. R. (2019). Area-level deprivation and preterm birth: results from a national, commercially-insured population. *BMC public health*, *19*(1), 236.

Porter, S. N. (2019). Poverty, Discrimination, and Health. In *Social Pathways to Health Vulnerability* (pp. 23-53). Springer, Cham.

Racic, M., Kusmuk, S., Kozomara, L., Debelnogic, B., & Tepic, R. (2006). The prevalence of mistreatment among the elderly with mental disorders in primary health care settings. *The Journal of Adult Protection*, *8*(4), 20-24.

Scott, W. K., Edwards, K. B., Davis, D. R., Cornman, C. B., & Macera, C. A. (1997). Risk of institutionalization among community long-term care clients with dementia. *The Gerontologist*, *37*(1), 46-51.

Wooten, N. R., Brittingham, J. A., Sumi, N. S., Pitner, R. O., & Moore, K. D. (2019). Behavioral Health Service Use by Military Children During Afghanistan and Iraq Wars. *The journal of behavioral health services & research*, 1-21.

Wray, J. M., Coulon, S., Wong, N., Szafranski, D., & Gros, D. F. (2019). A Single Integrated Behavioral Health Appointment Improves Patients' Perceptions of Behavioral Health Treatment. *The primary care companion for CNS disorders*, *21*(1).

Crouch, E., Strompolis, M., Radcliff, E., & Srivastav, A. (2018). Examining exposure to adverse childhood experiences and later outcomes of poor physical and mental health among South Carolina adults. *Children and Youth Services Review*, *84*, 193-197.

#### South Carolina Adolescent Mental Health Facts. (2018). HHS.gov. Retrieved 24 March 2019, from https://www.hhs.gov/ash/oah/facts-and-stats/national-and-state-data-sheets/adolescent-mental-health-fact-sheets/south-carolina/index.html

#### (2019). Countyhealthrankings.org. Retrieved 24 March 2019, from http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2015\_SC\_0.pdf

#### Celebrating 20 Years | Fighting Poverty in South Carolina. (2019). Fightpovertysc.com. Retrieved 24 March 2019, from https://fightpovertysc.com/