Reducing Mortality Rate of Heart Disease in African American Adults in Jackson County, Mississippi

Annie Goyanes

This program's main objective is to reduce the mortality rate of heart disease among African American adults in Jackson County, Mississippi. Main causal factors of this health issue are poor diet, smoking, physical inactivity, access to healthy food, and the design of the neighborhood.[1] This could mean if sidewalks are walkable, there is access to a lot of fast food establishments or liquor stores, parks, and others.[1] An example of some moderating factors are the increase of fruits and vegetable consumption, social and family support, to be able to manage stress, and maintain healthy weight.[1] Some mediating mechanisms are to increase the access and quality of healthcare, to promote getting regular health and preventive screenings, medication adherence, to promote health equity, and to increase access to education and self-management skills.

There are multiple goals for this program which guide the evaluation questions. The first goal is to increase access to medical services for African American adults in Jackson County, Mississippi. The second goal is to increase preventive screenings for blood pressure, cholesterol, and blood glucose among African Americans in Jackson County, Mississippi. The third goal is to increase access to self-management programs for increasing physical activity and healthy eating habits. The first evaluation question pertains to the second goal: Does the number of preventive screenings for heart disease risk factors increase in the community 3 years after the program? The second and third evaluation questions pertain to the third goal. The second evaluation question states: Did the participants incorporate moderate-intensity physical activity 150 minutes each week 6 months after the self-management program? The third evaluation question states:

Did the participants incorporate eating fruits and vegetables into their weekly schedule 9 months after the self-management program?

The one-group pretest/posttest evaluation design would suit the first and second evaluation question. This evaluation collects outcome/results data for participants before and after the program.[3] For the first program evaluation, there will be records of screenings done in community clinics, hospitals, and local health departments. For this program, community organizations will be promoting the preventive screenings, so using data from before the intervention can be beneficial in determining if the program gave the community more access to screening resources. One would have to take into account other factors on why preventive screenings could increase in the community to reduce bias. Some factors that can increase preventive screenings are: economic growth in the community, health policies, an increase in access to medical services and education, and the overall promotion of health equity,

For the second program evaluation, data would be collected through a questionnaire to examine the level of physical activity participants had before the intervention.[3] Since the testing effect can sometimes affect posttest data, the participants will record the amount of physical activity they do during and after the intervention.[3] The process of instrumentation would be done.[3] Thus, the questionnaire done before the second intervention would not be mentioned or given anything so that there is no bias and the participants do not over or under-report the
amount of physical activity done. One can use this effect evaluation if it requires fewer resources or if randomization of participants cannot be done.[4] A disadvantage is that since there is no

comparison group, it can be difficult to analyze if any changes have occurred regardless of the intervention.[3] Thus, making the one-group pretest/posttest a weak design for impact evaluation.

The two-group pretest/posttest evaluation design would suit the last evaluation question the best. This evaluation collects outcome data from program participants and non-participants before and after the program.[3] The evaluators must set up the groups to be as similar as possible by carefully selecting the comparison group, the ones not participating in the program.[3] The main advantage of this evaluation design is that there is assurance in the outcomes having an effect on the results of the program.[4] One can be able to determine how much of an impact the outcomes have on the participants.[4] There are some disadvantages that come with this design like selection bias and a tendency of results of different groups to start to become more similar over time.[3] It can also be demanding of time and resources.[4] This design is best used when outcomes occur soon after the program.[3] If the outcomes are expanded over a period of time, the more likely the two groups are to have no differences on the outcome variable.[3]

For the goals and objectives this program is trying to reach, I would do the two-group pretest/posttest to measure the participants physical activity and fruit and vegetable consumption as well as if the community has increased preventive screenings. One would have to consider various environmental, socioeconomic, and behavioral factors that could possibly interfere with the posttest results. If there is data on the participants before and after the program, and the goals and objectives for the participants have been met, then this can be done throughout the community to improve overall health.

References

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