

Improving worksite obesity rates in a manufacturing plant: A prospective cohort study

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Obesity affects individuals physically and emotionally, while contributing to direct and indirect employer costs. Population based obesity interventions such as educational and environmental supports, and a targeted individual intervention with the diabetes prevention program (DPP). Lifestyle curriculum offered at the worksite could promote healthy lifestyle decision making resulting in weight reduction. This quality improvement project was designed to improve obesity rates (BMI 30+) in a New Mexico manufacturing plant from 30.2% in 2011 to 29.6% in 2012. A pre/post cohort design evaluated the primary outcome of worksite obesity rate in 2011 vs. 2012, and secondary outcomes of weight and BMI changes in the DPP participants. Worksite population based obesity interventions included interactive dietary education, cafeteria meal redesign, physical activity and bariatric surgery education. DPP lifestyle curriculum explored foundational skills, controlling one's external environment and psychosocial issues related to body weight. Correlation between DPP session attendance and weight loss were evaluated as a process measure. Worksite obesity rate improved but was not statistically significant ($z=0.82$, $p=0.205$, $OR=0.77$). DPP participants achieved statistically significant changes in body weight ($p<0.001$) and BMI ($p<0.001$). As a process measure, DPP session attendance moderately correlated with weight loss $r=0.51$ ($p=0.002$). Multicomponent worksite obesity interventions support weight loss efforts for employees.

Biography

Karla K. Giese, DNP, RN, FNP-BC, CDE is a nurse practitioner with Johnson & Johnson Global Health Services providing personal healthcare to manufacturing plant employees. Prior to joining Johnson & Johnson in 2012, she acquired extensive experience as a nurse practitioner in endocrinology, family practice, and lifestyle coaching. She earned a Bachelor of Science in Nursing from the University of Wisconsin, a Master of Science in Nursing from Old Dominion University, and a Doctorate of Nursing Practice from the University of Colorado-Anschutz Medical Campus. In addition to clinical practice, she is an assistant Professor of Nursing with Liberty University.

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