

Outcomes from efforts at advancing capacity for manufacturing quality medicines in sub-Saharan Africa - the BIRS program

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Abstract:

Some low-income economies, within sub-Saharan Africa employ anti-counterfeiting devices to determine prevalence of spurious and falsified medicinal products. This is considered a lagging, reactive measure to access quality of health commodities. A more pro-active measure, which trains professionals that are relevant in the healthcare sector, was introduced within the sub region. The Purdue Biotechnology Innovation and Regulatory Science (BIRS) Master's program provides advanced pharmaceutical education which aims to reduce the prevalence of spurious medicines by building human capacity to initiate and sustain manufacturing quality medicines within African sub-region. Participants are drawn from national regulatory bodies, pharmaceutical industries and academia. The BIRS training equips them in Pharmaceutical Good Manufacturing Practices (GMP) as well as other quality assurance principles to enable the sub-region attain international standards. In this mixed method research, we used qualitative case studies to assess the impact of BIRS training with a purposeful convenient sampling of alumni students in the areas of pharmaceutical

manufacturing and quality control. Parametric quantitative method was also used to test our hypothesis that the program participants will significantly increase over years if it was meeting set objectives within sub-Saharan Africa. The results indicated that the alumni from ten countries have implemented and sustained remarkable projects in the area of Pharmaceutical GMP and laboratory quality controls. Furthermore, participants from 2016 (Males = 17, Females = 8), to 2018 (14, 8), increased in year 2020 (31, 22), p-values (less than 0.1, $\alpha = 0.1$). We concluded the program is impacting sustainable medicines initiative in sub-Saharan Africa.

Biography:

Mercy Okezue has worked for 15 years as a regulatory scientist with Nigeria's Medicines' National Regulatory Authority, and is currently a PhD student at Purdue University, USA. She has co-authored 4 publications in the area of laboratory quality control.

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