Multi-indexed orthogonal polynomials satisfy second order differential (difference) equations. They start at degree $\ell \geq 1$ and form a complete set of orthogonal functions. They are obtained by deforming the classical orthogonal polynomials (e.g. Jacobi, q-Racah, Askey-Wilson etc) in terms of multiple Darboux-Crum transformations and their difference analogues [1,2,3]. In the case of Jacobi, they form global solutions of Fuchsian differential equations having $3+\ell$ regular singularities [1]. Multi-indexed q-Racah and Racah polynomials and their reductions provide ample examples of exactly solvable birth and death processes [4].