Hydrazone Schiff base and metal complexes have attracted considerable attention owing to their importance for biological and pharmacological activities. It has chelating capability and structural flexibility with various metals. A tridentate ligand, (E)-N'-(1-pyridine-2-yethylidene)benzohydrazide (HL1a) was synthesized from condensation of 2-acetylpyridine and 2-hydroxybenzohydrazide in 1:1 ratio. Three Co(II), Cu(II) and Ni(II) complexes were obtained from reaction of ligand with metal salts in 2:1 ratio. HL1a and its complexes were characterized using elemental analysis, IR, 1H NMR, magnetic moment and single X-ray crystallography. From the IR, three significant peaks of ligand, i.e., carbonyl (C=O) appeared at 1638 cm⁻¹, azomethine (C=N) at 1605 cm⁻¹ and acetylpyridine ring nitrogen (C=N⁺) at 1547 cm⁻¹, experienced a shift to lower frequencies upon complexation. The ligand crystallized in the orthorhombic space group Pbc a, with a=12.863(7) Å, b=11.837(6) Å, c=17.002(10) Å, V=2589(2) Å³, and Z=8. Magnetic moment data shown that all complexes exhibited six coordinated structures indicating the octahedral geometry.