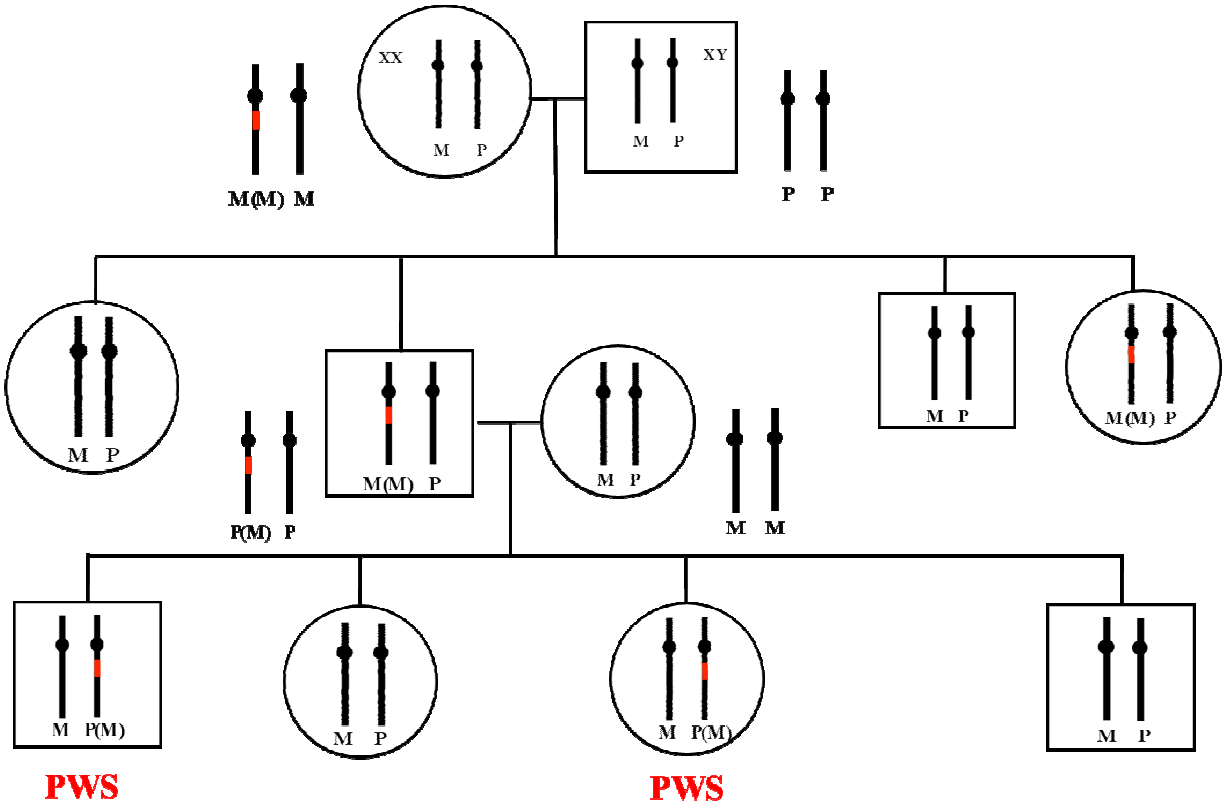
A diagram representing the silent transmission of a microdeletion in the imprinted region of chromosome 15 through a family. The deletion occurs in the grandmother who passes on the mutation to 50% of her children. Her son will then carry the mutation but will not have the PWS phenotype as he possesses the imprinted region from his father. However half of the sons children will be at risk of PWS as he will pass on the mutation and they will lack the imprinted region which can only be sought from the paternal chromosome.



(Circle = female, Square = Male, M = Maternal Chromosome, P= Paternal Chromosome, (M) = PWS = Individuals with Prader-Willi Syndrome)