```
//Java solution

public class Solution {

  int longest = 0;

  public int longestPath(TreeNode root) {
    if(root == null)
      return 0;
    if(root.children == null || root.children.size() == 0)
      return 1;
    longest = 1;
    for(int i=0; i<root.children.size(); i++)
      findLongestPath(root.children.get(i), root.val+1, 1);
    return longest;
  }

  public void findLongestPath(TreeNode root, int expected, int len) {
    if(root == null) {
      longest = Math.max(len, longest);
      return;
    }
    if(root.val == expected){
      if(root.children == null || root.children.size() == 0) {
         longest = Math.max(len+1, longest);
         return;
      }
      else
        for(int i=0; i<root.children.size(); i++)
          findLongestPath(root.children.get(i), root.val, len+1);
    }
    else {
       longest = Math.max(len, longest);
       return;
    }
 }

}
```