Parameter of interest:

$$(Y(1), Y(0), D) \sim F \tag{1}$$

Observed vector:

$$(DY(1) + (1 - D)Y(0), D) \sim G \tag{2}$$

Consider the case when $P(D = 1) = 0$. Does it necessarily imply that F cannot be identified? I think so now...

But my question was inspired by the following consideration: Take the subset of the sample space $S = \{\omega \in \Omega : D(\omega) = 0\}$. We started with the assumption that $P(S) = 0$. I was thinking that maybe one can still map S into all possible values of $Y(0)$ in a way that would still make identification possible. However, the thing is that any subset of a measure 0 set has to have measure 0 also, damn... Therefore, whatever way we map elements of S into the range of $Y(0)$, $P(Y(0) < y|D = 0) = 0$, so the conditional distribution... wait WHAT THE FUCK, how do conditional distributions work if the probability of any variable taking a certain value is 0??? geezus... brb