

Neighbourhood variation and inequity of primary health service use by a cohort of mothers from London-Middlesex, Ontario.

Background:

Primary health service use (P-HSU) may be influenced by individual and contextual characteristics and is equitable when driven by need.

Objectives:

The first study objective was to determine whether maternal P-HSU varies between neighbourhoods, and if so, estimate the effects of contextual characteristics on use. Secondly, to determine whether the effects of maternal need factors on P-HSU are dependent on predisposing and enabling factors.

Methods:

The study population was from a population-based prenatal cohort from London-Middlesex, Ontario with follow-up until children were preschoolers. Maternal characteristic data were linked to contextual characteristic data from a second residential location database. The sample included 1,432 mothers. Multilevel logistic regression modeled maternal and contextual characteristics associated with P-HSU, and interactions of need factors with predisposing and enabling factors to assess inequity of use.

Results:

P-HSU varied between neighbourhoods ($p=0.02$). Urban/rural residence was the only contextual characteristic retained in the model to explain this variation. Obesity's effect on P-HSU was lower for mothers residing in rural compared to urban neighbourhoods ($OR=0.28$, $p<0.01$). Obese mothers had lower odds of service use when living in low-income compared to high-income households ($OR=0.35$, $p=0.02$). The effects of pregnancy and depression on P-HSU were not dependent on other factors.

Conclusions:

Results indicate that differences in P-HSU exist between neighbourhoods, partially explained by urban/rural residence. Obese mothers residing in rural neighbourhoods and in low-income households were identified as at-risk groups. This research has the potential to inform Canadian health policy with regards to contextual effects and inequity of maternal P-HSU.