

Inpatients with diabetes: Insulin regimen before admission is related to satisfaction with hospital treatment and negative well-being.

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Background: Multiple daily injection (MDI) regimens are often associated with better glucose control. However hospital admission limits usual freedoms (meal content/timing) available to individuals using MDI regimens. We examined how two common insulin regimens relate to diabetes treatment satisfaction and depression/anxiety whilst hospitalised.

Methods: Diabetes Inpatient Specialist Nurses (DISNs) from 58 UK hospitals recruited insulin-treated adult inpatients. British-born, English-speaking participants completed English questionnaires shortly before discharge including: Diabetes Treatment Satisfaction Questionnaire for Inpatients (DTSQ-IP), the Negative Well-Being (NWB) subscale (from WBQ-12) and a general information questionnaire.

Findings: Of 1319 inpatient responders, 359 used 4 or more daily injections (MDI), 280 used twice-daily pre-mixed insulin (BD), and 269 were new to insulin this admission (inpatients with incomplete data, and less-common regimens were omitted); Inpatients using MDI regimens before admission were significantly ($p < 0.001$) less satisfied with their diabetes treatment than the other groups. Furthermore, the MDI group reported more NWB than the BD group ($p = 0.028$). NWB was associated with gender and age regardless of insulin regimen (i.e. women and younger adults reported more NWB than men and older adults). Controlling for age and gender, NWB is inversely related to treatment satisfaction (increased NWB was associated with decreased satisfaction) only for those on the MDI regimen ($r = -0.19$, $p = 0.001$). Quotations from inpatient interviews confirm and clarify these relationships.

Discussion: MDI regimens usually provide increased flexibility of lifestyle and glycaemic control but in the rigid confines of the hospital inpatient environment MDI regimens were associated with less satisfaction with hospital treatment and more anxiety/depression.