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Birzeit University

Faculty of Pharmacy, Nursing and Health Professions

**BIOSTATISTICS**

**NURS3221**

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1. The correlation between PCV and Hb is strong pearson correlation is 0.673 and it is significant as the p value is 0.001 and its less than 5%

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| --- | --- | --- |
| HB and PCV | Pearson correlation | 0.673 |
| SIG ( P value) | 0.001 |

The correlation between Age and HB Strong because pearson correlation is 0.880 and it is statically significant as the P value is 0.0001 less than 5%

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| HB and Age | Pearson correlation | 0.880 |
| SIG ( P value ) | 0.0001 |

1. The change in PCV causes a change in the Hb .. Hb = 5.59+0.205 (PCV) which means every time that PCV is increasing by 1 unit Hb will increase by 0.205G/dl ,

And its statically significant p value is 0.001 less than 5% and the 95%CI doesn’t cross by the value (0.093-0.316)

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|  | B | 95% CI | | P value |
| Constant | 5.589 | 0.872 | 10.305 | 0.023 |
| PCV | 0.205 | 0.093 | 0.316 | 0.001 |

1. When adding age to the regression the relation between PCV and Hb is still significant with a P value of 0.008 less than 5% that means that age partially explains this relation and it is a partially confounder between PCV and Hb. This that the equation now is Hb= 5.24+ 0.110 ( age ) + 0.097( PCV) . if Age was a complete confounder that mean we would have removed the PCV from the equation ( if PCV p value is higher than 5% )

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|  | B | 95% CI | | P value |
| Constant | 5.239 | 2.693 | 7.784 | 0.0001 |
| PCV | 0.097 | 0.28 | 0.166 | 0.008 |
| Age | 0.110 | 0.076 | 0.145 | 0.0001 |