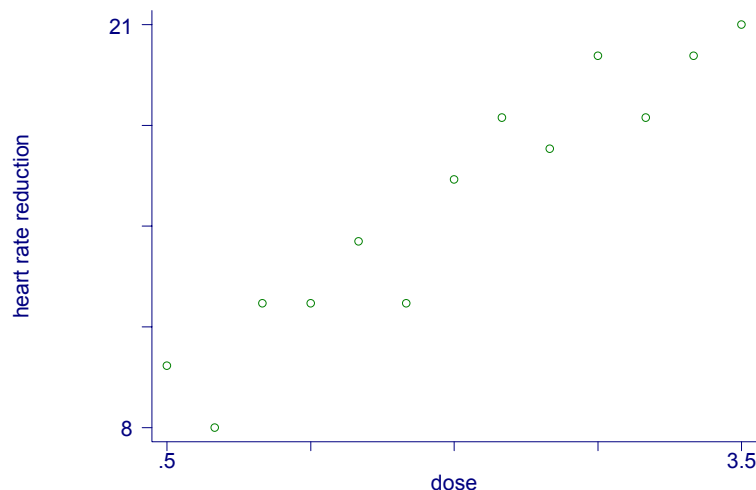


```

-----
log: C:\Documents and Settings\ngupte\Desktop\Totays lab\log1.smcl
log type: smcl
opened on: 5 Feb 2003, 07:49:45

```

```
. * plot the data
```



```
. regress hrr
```

Source	SS	df	MS	Number of obs =	13
Model	0.00	0		F(0, 12) =	0.00
Residual	210.307692	12	17.525641	Prob > F =	.
Total	210.307692	12	17.525641	R-squared =	0.0000
				Adj R-squared =	0.0000
				Root MSE =	4.1864

hrr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
_cons	15.23077	1.161088	13.12	0.000	12.70097 17.76056

```
. regress hrr dos
```

Source	SS	df	MS	Number of obs =	13
Model	190.087912	1	190.087912	F(1, 11) =	103.41
Residual	20.2197802	11	1.83816184	Prob > F =	0.0000
Total	210.307692	12	17.525641	R-squared =	0.9039
				Adj R-squared =	0.8951
				Root MSE =	1.3558

hrr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
dos	4.087912	.4019909	10.17	0.000	3.203136 4.972688
_cons	7.054945	.8875718	7.95	0.000	5.101413 9.008477

```
. * estimate of sigma^2
```

```
. disp 20/11
1.8181818
```

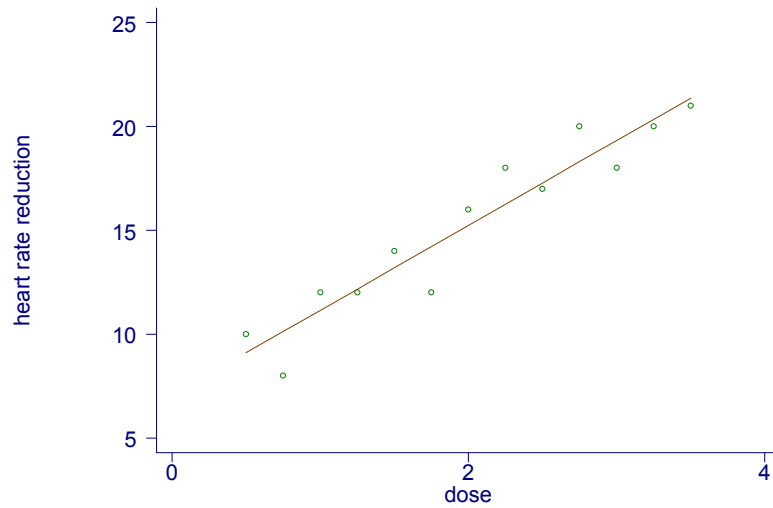
```
. * the value of r^2
```

```
. disp 190.087/210.31
.90384195
```

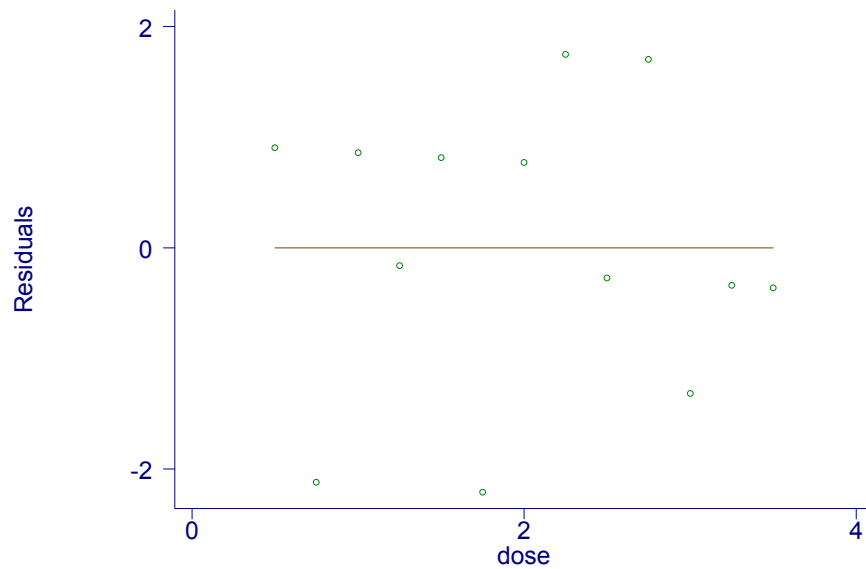
```
. predict hrrr
```

```
(option xb assumed; fitted values)
```

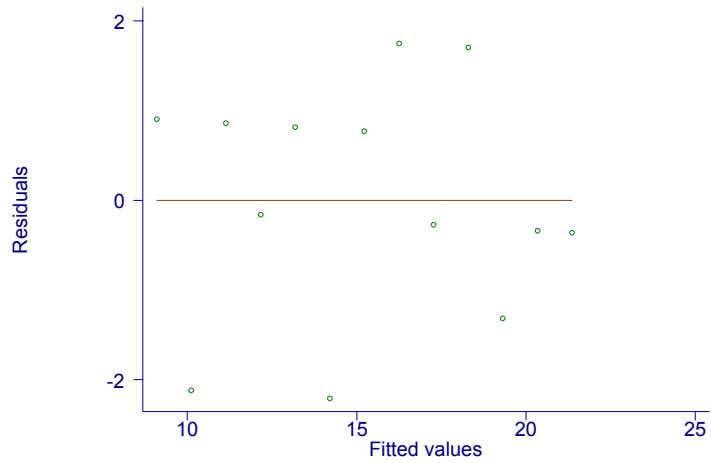
```
. predict res, resid
. gen r=0
. graph hrr hhrr dos, c(.1) s(oi) xlab ylab
```



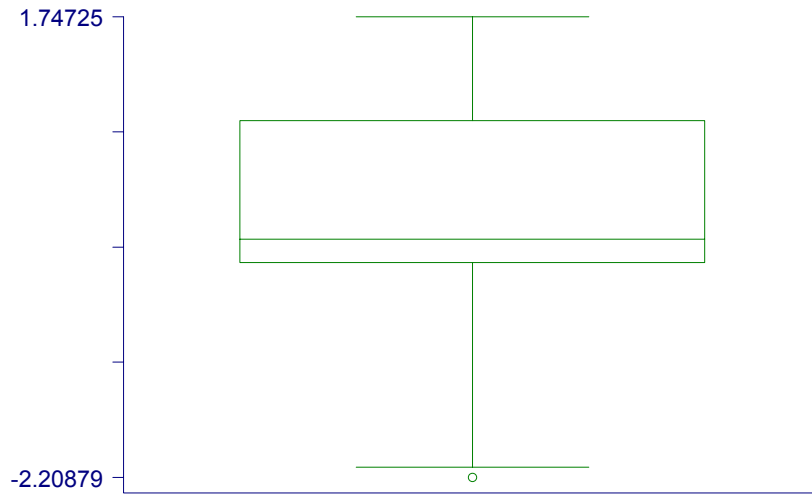
```
. graph res r dos, c(.1) s(oi) xlab ylab
. * the graph checks the assumption of linearity and constant variance
```



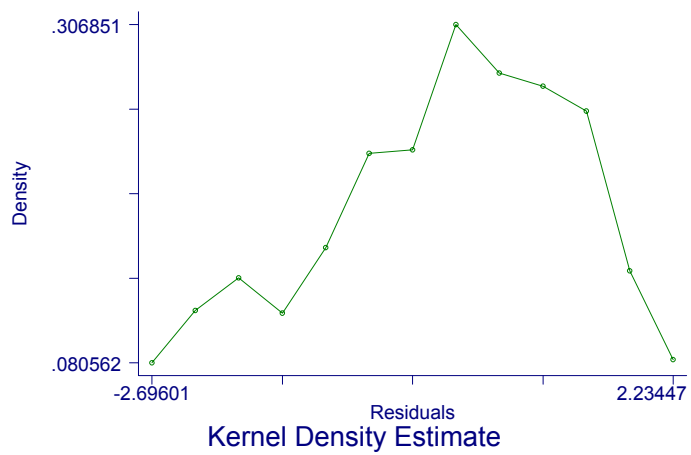
```
. graph res r hhrr, c(.1) s(oi) xlab ylab
. * the graph check the assumption of constant variance
```



```
. graph res, box
  Residuals
```



```
. kdensity res
(n() set to 13)
```



```
. * test fr normality
. swilk res
```

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
res	13	0.92226	1.369	0.616	0.26909

. * we don't have enough evidence to reject normality