

## **RESULTS**

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Table (1) gives the number and sex of study population in each school.

| <u>School</u>          | <u>Male</u> | <u>Female</u> | <u>Total</u> |
|------------------------|-------------|---------------|--------------|
| El-Shaheed Salah Salem | 121         | 237           | 358          |
| Molhaket El-Moalemat   | 275         | 266           | 541          |
| El-Imam Mohamed Abdou  | 366         | 319           | 685          |
| El-Thaora              | 231         | 181           | 412          |
| Bekera                 | 244         | 157           | 401          |
| Total                  | 1237        | 1160          | 2397         |

It is revealed by this table that 1237 males and 1160 females were examined.

The coverage of females by schooling is slightly lower than that of males (Male : Female = 1.066 : 1).

Table (2) shows the prevalence of cases by schools.

| <u>School</u>          | <u>No. of cases</u> | <u>% of total</u> |
|------------------------|---------------------|-------------------|
| El-Shaheed Salah Salem | 1                   | 0.28              |
| Molhaket El-Moalemat   | 2                   | 0.37              |
| El-Imam Mohamed Abdou  | 4                   | 0.58              |
| El-Thaora              | 1                   | 0.24              |
| Bekera                 | 3                   | 0.75              |
| Total                  | 11                  | 0.46              |

The prevalence varies from 0.24 % in El-Thaora to 0.75 % in Bekera.

Our eleven cases with rheumatic heart disease were divided into 2 groups:

Group I : cases with rheumatic activity (active cases).

Group II: cases without rheumatic activity (quiescent cases).

Table (3) shows the clinical data of quiescent cases.

| No.  | Age in years | Sex    | Cardiac lesion             | History of |        |
|------|--------------|--------|----------------------------|------------|--------|
|      |              |        |                            | arthritis  | Chorea |
| (1)  | 7            | Female | M.S.                       | -          | -      |
| (2)  | 8            | Female | M.S. + pulm. hypertension. | +          | -      |
| (3)  | 8            | Male   | D.M. + pulm. hypertension. | -          | -      |
| (4)  | 10           | Female | D.M.                       | +          | -      |
| (5)  | 12           | Female | M.R.                       | -          | +      |
| (7)  | 8            | Male   | A.R.                       | +          | -      |
| (8)  | 12           | Male   | D.M. + pulm. hypertension. | +          | -      |
| (9)  | 9            | Male   | M.R.                       | +          | -      |
| (11) | 11           | Female | D.M.                       | +          | -      |

Table (4) shows the clinical data of active cases.

| No. | Age in years | Sex    | Cardiac lesion             | Arthritis | Chorea |
|-----|--------------|--------|----------------------------|-----------|--------|
| 6   | 8            | Female | D.M. + pulm. hypertension. | +         | -      |
| 10  | 10           | Female | M.S. + pulm. hypertension. | +         | -      |

From tables (3) and (4), it is clear that:

- 2 cases (18.8 %) out of the total 11 cases denied any history of the first attack of rheumatic fever.
- 6 cases of the quiescent group gave history of arthritis and 1 case of chorea.

The 2 active cases were presenting by carditis and arthritis. The mitral valve was involved in 10 cases (90.91 %) and the aortic valve in a single case (9.09 %).

Table (5) shows the prevalence of cases per sex.

| <u>Sex</u> | <u>No. of cases</u> | <u>Total No. examined</u> | <u>%</u> |
|------------|---------------------|---------------------------|----------|
| Male       | 4                   | 1237                      | 0.32     |
| Female     | 7                   | 1160                      | 0.60     |
| Total      | 11                  | 2397                      | 0.46     |

There is a significant prevalence of rheumatic heart disease among females than males (Female : Male = 1.75 : 1).

Table (7) shows R.B.C's count, Hb %, A.S.O. titre, E.S.R. and C.R.P. in quiescent cases.

| Case no. | R.B.C's/c.mm | Hb %  | A.S.O.<br>Tu/ml. | E.S.R.   |          | C.R.P. |
|----------|--------------|-------|------------------|----------|----------|--------|
|          |              |       |                  | 1st hour | 2nd hour |        |
| (1)      | 4,680,000    | 85    | 190              | 7        | 14       | -      |
| (2)      | 4,540,000    | 82    | 200              | 6        | 18       | -      |
| (3)      | 3,750,000    | 75    | 175              | 12       | 25       | -      |
| (4)      | 4,300,000    | 75    | 220              | 9        | 16       | -      |
| (5)      | 4,140,000    | 75    | 160              | 8        | 15       | -      |
| (7)      | 4,800,000    | 89    | 190              | 7        | 13       | -      |
| (8)      | 4,590,000    | 88    | 210              | 9        | 12       | -      |
| (9)      | 4,310,000    | 80    | 160              | 8        | 12       | -      |
| (11)     | 3,900,000    | 75    | 180              | 9        | 14       | -      |
| Mean     | 4,334,444    | 80.44 | 187.22           | 8.33     | 15.44    | -      |
| S.D.     |              | 5.83  | 20.78            | 1.73     | 4.07     | -      |

In the quiescent cases, there was no anaemia mean R.B.C's count (4,334,444/c.mm.) and mean Hb % (80.4 %).

There is a normalization of E.S.R. mean in the 1<sup>st</sup> and 2<sup>nd</sup> hour (8.33/15.44).

The C.R.P. is negative in all cases.

A.S.O. ranges between 160 and 220 tu. with a mean of  $187.22 \pm 20.78$ .

Table (8) shows the hematological data of active and quiescent cases.

|                                      | Active    | Quiescent  |
|--------------------------------------|-----------|------------|
| Mean R.B.C's/c.mm                    | 3,065,000 | 4,334,444  |
| Mean Hb %                            | 62 %      | 80.44 %    |
| Mean value of E.S.R.<br>1st/2nd hour | 31/64.5   | 8.33/15.44 |



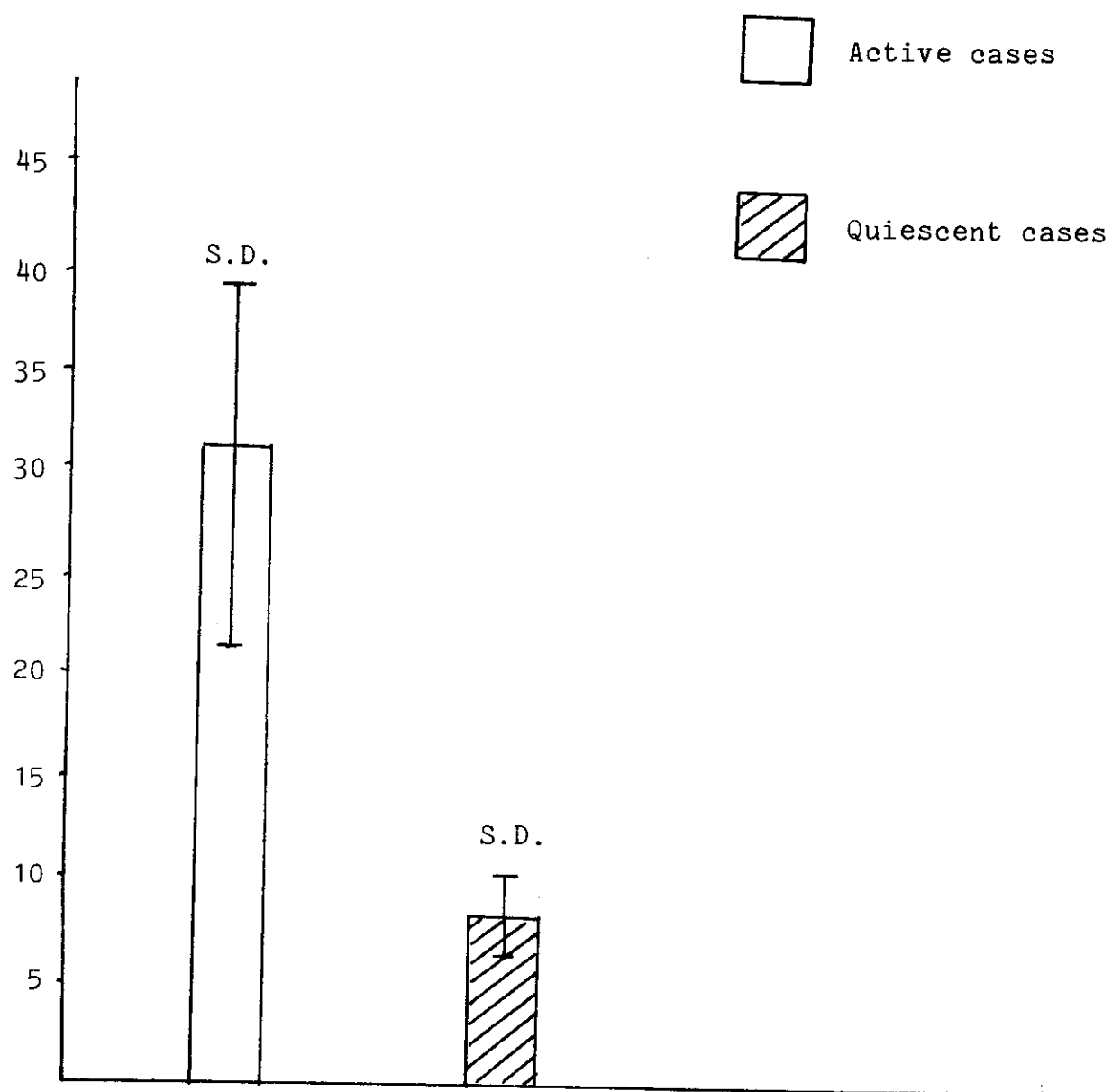


Figure (1) shows comparison between the mean value of E.S.R. in the 1<sup>st</sup> hour in active and quiescent cases.

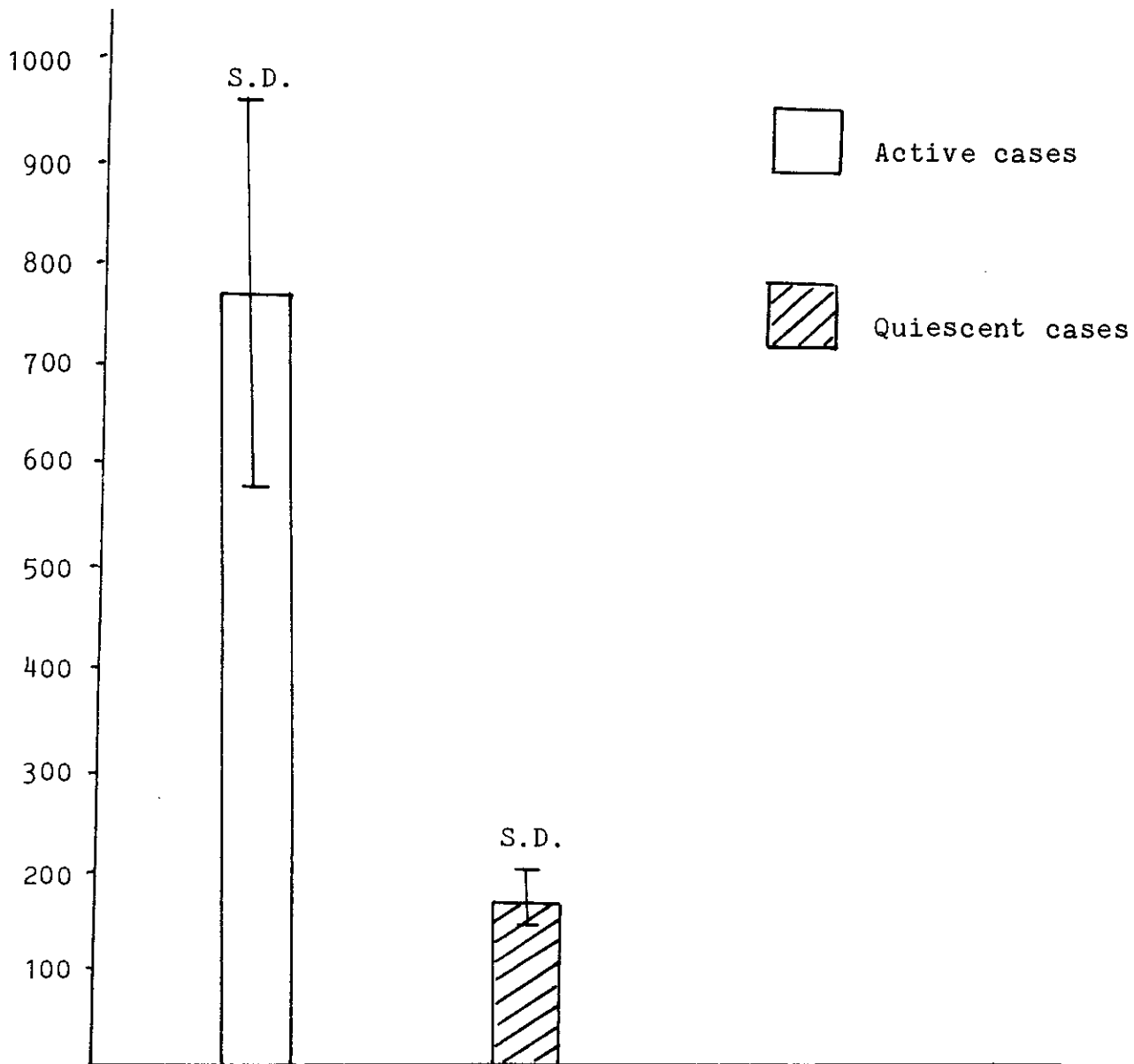


Figure (2) shows comparison between the mean value of A.S.O. in active and quiescent cases.

Table (9) shows determination of blood groups of our patients.

| Blood group | No. of patients | %     |
|-------------|-----------------|-------|
| A           | 5               | 45.46 |
| B           | -               | -     |
| AB          | 2               | 18.18 |
| O           | 4               | 36.36 |

The relative incidence of rheumatic heart disease in persons with group A compared with group O is 1.25 : 1.