

« » (Kurdish Jewish) %
 « » .()
 FST %
 () .() % /
 ()fava

() G6PD

FST

EPI

()

Sequential

(FST)Fluorescent G6PD
 G6PD .() Spot Test
 % % % % /
 (<%)
 (% /) (>%)
 .() (% /)

G6PD

%				
% / % /	% /			
% / % /	% /			
	/			

(Partially deficient) (Sufficient)
 (Severly deficient)

... (G6PD)

χ^2

.()

(P< /)

Relative risk= /

% /

.()

/

(% %) %

(sd=) /

(sd= /)

T-Test

.() (P>0.1)

G6PD

%

(hemizygote)

G6PD

G6PD

X

/ ± /	
/ ±	
/ ± /	

G6PD

()

% / .

/

% /

Fisher exact

.(p>0.1)

G6PD

()

% /

G6PD

:

() /	/		
() /	/		

.()

% /

/ G6PD

(CI 95%= / /)

.()

/

G6PD

/ /

. () (p<0.01)
 % / % /
 % /
 % /
 . () % %
 (FST)
 G6PD % / % /
 . ()
 WHO Fricsher
 . () () %
 % /
 % / G6PD . ()
 . ()
 () % / %
 () WHO

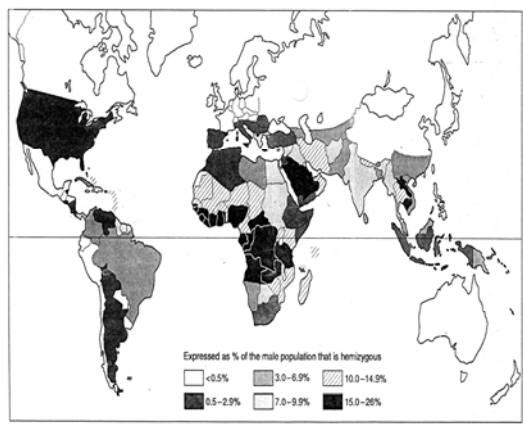


Fig. 1 World distribution of glucose-6-phosphate dehydrogenase (G6PD) deficiency.

G6PD : % / % /
 G6PD : []
 G6PD
 G6PD
 G6PD : , , ,
 G6PD : , , ,

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G6PD

Survey of the Prevalence of Glucose-6-Phosphate Dehydrogenase

Deficiency in Rasht-Iran

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Abstract

Introduction: G6PD Deficiency is the most common enzyme deficiency in all over the world. The prevalence of this defect differs in the different parts of the world (from 0.1 to 50 percent). Clinical complications such as Acute Hemolytic Anemia and Neonatal Jaundice are common in areas that materials which have oxidant factor such as Fava bean is used excessively.

Objective: Study of the prevalence of this defect in Rasht.

Materials and Methods: In this cross-sectional study, 605 male and 585 female neonates were examined by FST (Fluorescent Spot Test) in 17 Shahrivar Hospital.

Results: 59 males (9.8%, CI 95%=7.5-12.5%) and 18 females (3.1%, CI 95%= 1.9-4.9%) were detected as G6PD Deficient. Total prevalence was 6.4 percent (CI 95%: 5-8 percent). It is obvious that G6PD Deficiency in males was more than females ($p < 0.001$, RR=3.3). There was no significant relation between G6PD Deficiency and being term or preterm ($p > 0.1$).

Conclusion: Because G₆PD is sex related, its three times more prevalence in male compared with female in expected. This deficiency is more common in south compared with north of Iran(probably because of malaria) but the excessive use of Fava bean is the main reason for incidence of its complications in this area, then, the wise policy would be screening neonates and instruction parents.

Key words: Epidemiology/ Glucose-6-Phosphate/ Glucose phosphate Dehydrogenase/ Jaundice, Neonatal