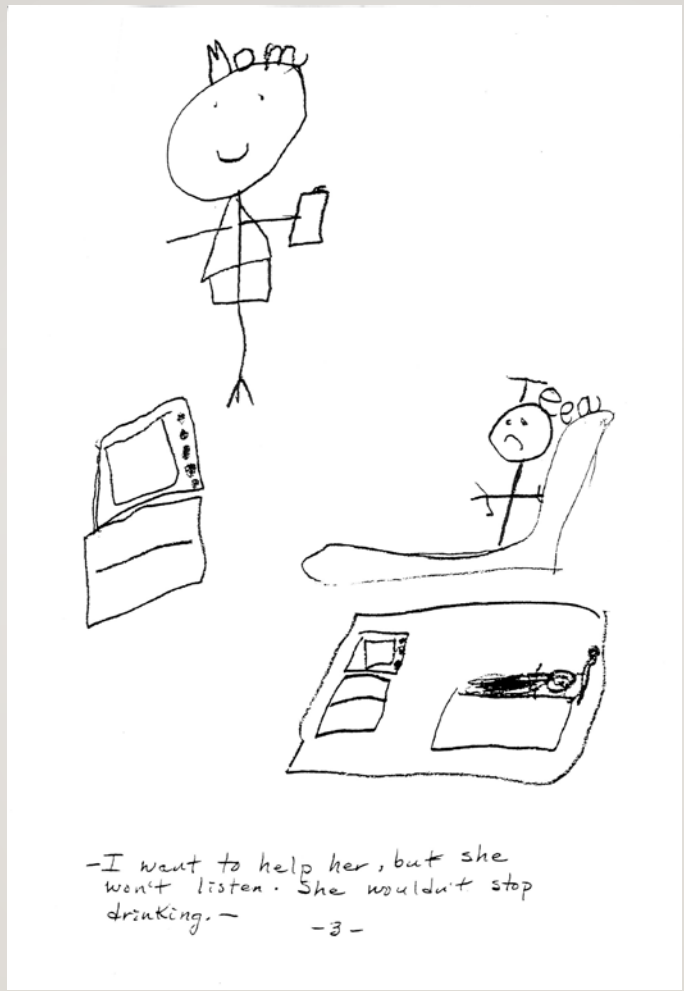


FASD: SO WHAT IS PRACTICAL?





81 YEAR OLD DIAGNOSED WITH ARND

- Dear Larry Buyrd
- Thank you for seeing me. All my life I have known something was wrong. When you explained FAS to me I knew it was good. My life would be better if I knew earlier. My whole family died from FAS my mother her sisters all my brothers They had bad livers from alcohol. I cry when I think of all the babies who died.
- I am sad and happy that at 81 I no.

I feel sad because I want the
blinds and the purple collar
I'm scared because I feel
uncomfortable in the kitchen.

I want to go away
and I rip my shirt because
I was mad

Dear teachers members,

Why do you only do teacher on littler kids like my sister Cheyenne? Because it upsets me because I to have adhd and I when't to the same school as my sister Cheyenne. I when't to the Baxter elementary school for 4Th and 5Th grade and I didn't get to have even tests! I go to Middle School.

Sincerely,

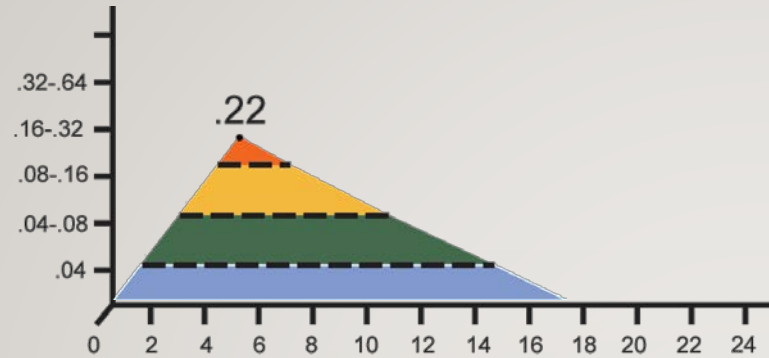
- SAF bad in Congo needs helps.
- Nurse

PROBLEM I: EXPOSURE ASSESSMENTS

EXPOSURE ENVIROMICS

- Detection
- Dispersion
- Dosimetry

ARCHITECTURE OF EXPOSURE EPISODES



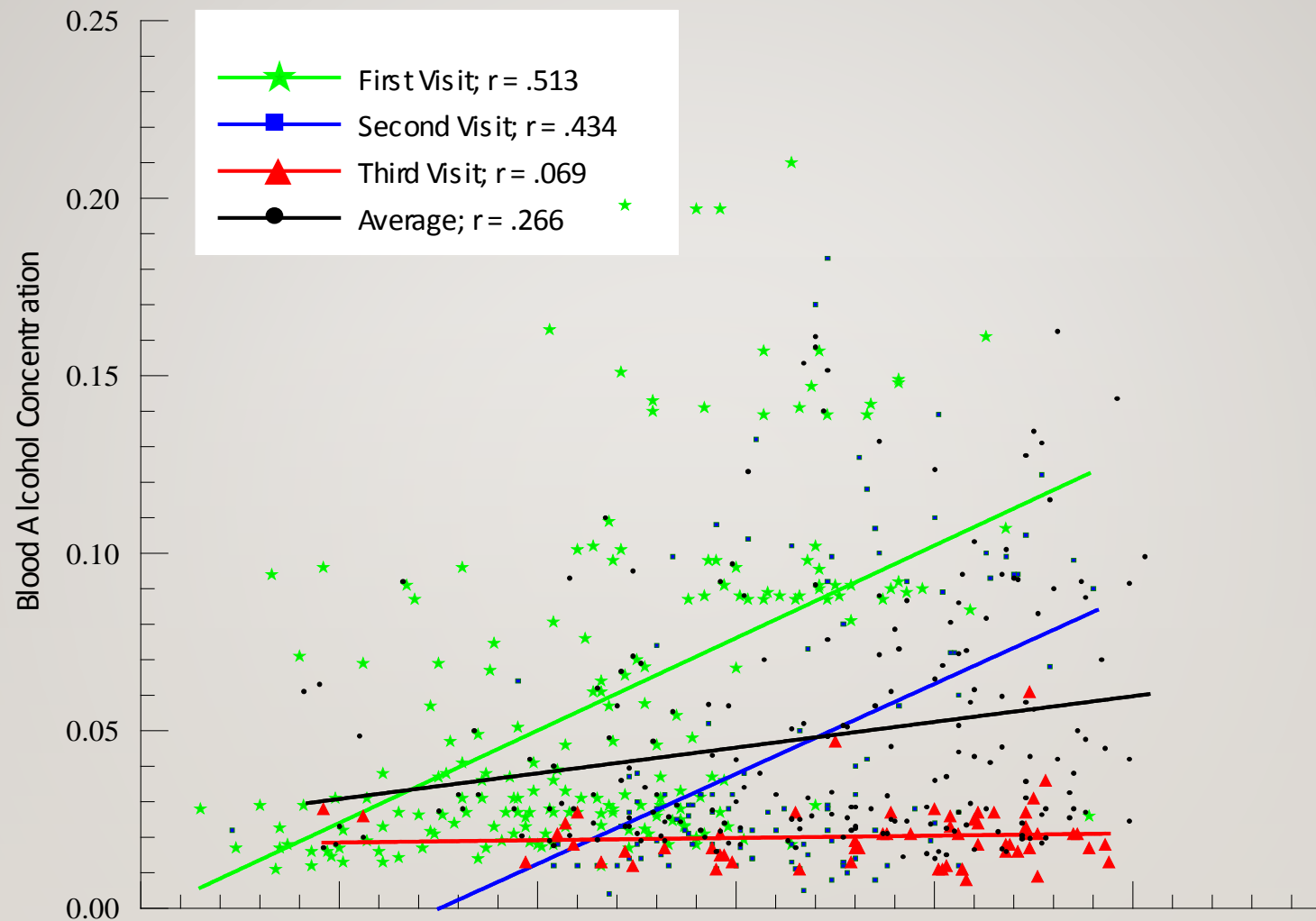
Dosimetry and cumulative exposure effects

- Drinking days
 - Drinks per day
 - Cumulative exposure
 - Polysubstance exposure
 - Multiplicative effect of combined exposure
- ▶ Smoking days
 - ▶ Cigarettes per day
 - ▶ Cumulative exposure



Time under
exposure curve

First In to Last Out



PROBLEM 2: GLOBAL DIAGNOSTIC CAPACITY

- Children 200-400 day
- Adults 100
- Corrections 30
- Juvenile Corrections 30-50
- NICU 30

Global Annual Births

n = 130,000,000 (353,000/day)

FASD Rate	FASD	Day
1%	1,300,000	3,562
5%	6,500,000	17,810
10%	13,000,000	35,620

Global Demand for FASD Diagnosis

• Rate	Birth -18	Per day (250)	10 Years (2,500)
• 1%	23,400,000	93,600	9,360
• 5%	117,000,000	468,000	46,800

NO Additional People

New and Existing (birth-18)

1% prevalence = 23,400,000 People

To see them in 10 years:

23,400,000 + 1,300,000 yr = 36,400,000 people

÷ 2,500 days =

14,560 cases/day for 10 years
(1,820 hr)

FASD: Cost of Diagnosis

Annual Per Person Health Care Expenditures

Cost*	<\$500	<\$200	<\$100
Countries	119	75	51

Optimal Cost of Diagnosis = \$ 1-2

* Inflation adjusted to 2011 US Dollars

Wikipedia 2-28-2019

Current Global FASD Diagnostic Capacity 200-400 per day Children

- 1% (increase capacity 36-72 times)
- 5% (180 to 360) times

3,000-4,000 NEW CLINICS NEEDED

PROBLEM 3: GETTING IT DONE

FASD Workforce Development

<u>Specialty capacity</u>	<u>Faculty</u>
• Pediatricians	250
• Psychiatrists	300-500
• Neurologists	50-100
• Family Practice	500
• Social workers	1,000
• Psychologists	300-500

- Low end = 1 (one hour) lecture per year
- High end = course content and board questions

WHAT'S PRACTICAL?

- ICD and DSM codes/Leads to \$\$\$
 - Screening
 - Diagnosis
- Standardized Exposure Assessments
- ARND or Similar Phenotype
- How can we do 14,000 cases per day?

FAS would be a low frequency diagnosis.