

The poor correlation between blood and urine concentrations, to the extent that it is a fact - it is only partially true - is an expression of physiological variation in the rate of the urinary excretion of lead. Our investigations in the lead metabolism in health and disease have shown the relationship clearly.

That blood level varies little except in response to exposure to and absorption of lead. The urinary level varies with water throughput and with other factors including varying degrees of renal dysfunction.

October 27, 1954

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intended writing. Unfortunately, I have had no chance to do the writing, although I have gathered up some other unpublished material from several sources. I seem to have boxed myself in fairly effectively with day to day work that has fragmented my time for study.

Since receiving your letter I have gone over the report again and this time in some detail. In so doing I made two pencil notes, one of which on the first page relates to a glaring fault in the text - a statement of Dr. Dreessen's which is so wrong that he should not be credited publicly with having made it. He may have lacked experience to this extent at that time, or he may have been misunderstood in part, but at least, our knowledge has gone far beyond the stage represented by this and some of the other discussions on lead poisoning in this paper. Another notation relates to the analytical data on blood in the table, which, if the other tabulated facts are valid, are utterly wrong and worthless. The values recorded, with three exceptions (value of 0.07, 0.09 and 0.07 listed in order from above downward) are within the normal range, and far from suggesting that these persons had lead poisoning, they would prove conclusively that they did not and could not have been suffering from lead poisoning at the time these analyses were made, if indeed, they had any relationship at all to the true facts. In addition they are quite out of line with the results obtained on the urine. Hence I would guess that the analytical work on both the blood and urine was unreliable. As I have pointed out elsewhere, poor analytical work is much worse than none at all, and therefore before attempting to appraise the validity and meaning of the other information in the article, I should simply discard the analytical data as contradictory and misleading.

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October 27, 1954

Dr. Lorin E. Kerr  
Asst. Executive Medical Officer  
United Mine Workers of America  
907 Fifteenth Street, Northwest  
Washington 5, D. C.

Dear Doctor Kerr:

I am returning the report on the occurrence of lead poisoning among orchard workers, in accordance with your request. I went over this rather hurriedly some time after you sent it and returned it to a sheaf of material which I was holding for study in connection with some intended writing. Unfortunately, I have had no chance to do the writing, although I have gathered up some other unpublished material from several sources. I seem to have boxed myself in fairly effectively with day to day work that has fragmented my time for study.

Since receiving your letter I have gone over the report again and this time in some detail. In so doing I made two pencil notes, one of which on the first page relates to a glaring fault in the text - a statement of Dr. Dreessen's which is so wrong that he should not be credited publicly with having made it. He may have lacked experience to this extent at that time, or he may have been misunderstood in part, but at least, our knowledge has gone far beyond the stage represented by this and some of the other discussions on lead poisoning in this paper. Another notation relates to the analytical data on blood in the table, which, if the other tabulated facts are valid, are utterly wrong and worthless. The values recorded, with three exceptions (value of 0.07, 0.09 and 0.07 listed in order from above downward) are within the normal range, and far from suggesting that these persons had lead poisoning, they would prove conclusively that they did not and could not have been suffering from lead poisoning at the time these analyses were made, if indeed, they had any relationship at all to the true facts. In addition they are quite out of line with the results obtained on the urine. Hence I would guess that the analytical work on both the blood and urine was unreliable. As I have pointed out elsewhere, poor analytical work is much worse than none at all, and therefore before attempting to appraise the validity and meaning of the other information in the article, I should simply discard the analytical data as contradictory and misleading.

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Dr. Lorin E. Kerr - (2) - October 27, 1954

clinical findings were valid, that some were probably not, and that proof of the occurrence of lead poisoning among these people is not available. I think that the thesis that such cases occurred in some number is probably correct, but the allegedly specific evidence both on the environmental and clinical sides of the situation is so weak as actually to subtract something from the plausibility of a simple statement of the facts and opinions. It is improbable that all of these diagnoses of lead poisoning were incorrect, but on the information given, it is reasonably certain, I believe, that some of them were incorrect.

In short, if I were in your position, I would not open up myself or my friends and associates to severe criticism, by publishing this report in this form. If I were to publish it, I'd merely recite the history of the potential exposure, dispensing with the highly imaginary figure given by the time x concentration calculation; I would state the case with reference to the numbers of cases reported as lead poisoning by attending physicians dispensing with all of the data on the analysis of urine and blood and boiling down the clinical findings to the overall symptomatic pattern, with or without the figures on the erythrocytes, hemoglobin and stippling. That is to say I would not attempt to prove the case, for the proof is not there. I'd simply leave it on the merits of the medical opinions, for whatever they are worth. They will then appear to be worth more (rather than less) than they actually are. If this sounds like clever tactics rather than an honest representation of facts, I can only defend it by saying that these medical opinions do have some worth and that they should not be discredited by inadequate "scientific" efforts.

My criticisms may seem somewhat harsh, but I hardly think they are. Rather I have undertaken to be quite frank, as your courtesy to me deserves, while recognizing that my criticism is more useful at this time than it would be if it were given after the publication of the article.

With kindest regards,

Cordially yours,

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Robert A. Kehoe, M. D.

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Enc.