

62. Let us now take these things all together—the overcrowding of the wards; the insufficiency of the ventilation; the position of the waterclosets, baths, &c.; and the condition of the floors, walls, &c.: do you think that these things can be safely allowed to remain as they are?—What do you mean by “safely allowed”?

63. Put it in your own words, if you like?—Well, I think it is highly desirable to have the present state of things remedied. That is how I should like to put it.

64. *The Chairman.*] You mean, I suppose, that on account of the safety of the patients the present condition should not be allowed to remain?—For their welfare it should not.

65. *Mr. Solomon.*] Do you approve of the waterclosets, lavatories, and bath-rooms being directly in a hospital ward?—I do not.

66. Do you think that a trifling or a serious matter?—I think it is a serious matter.

67. I suppose it all tends to disturb the quality of the atmosphere?—It tends to render the atmosphere impure, provided, of course, that other bad conditions also exist.

68. Are the conditions to which you have just referred in detail—namely, the overcrowding, the want of sufficient ventilation, the position of the waterclosets, &c.—sufficient, in your opinion, to account for the stuffy condition of the wards which you found yourself to exist?—Decidedly.

69. So that I may say that one would expect to arise those various defects which within your own experience you actually found did arise?—I found that they actually arose.

70. You have told us that when you went into the wards you experienced a vitiated atmosphere. Did that happen in the surgical as well as in the medical wards?—Yes, in both wards.

71. In the surgical ward there were various kinds of cases, were there not?—Yes.

72. Do you think that patients—we will speak of those who have been operated on, or who have open wounds and are about to be operated on—can be allowed to remain in such an atmosphere with comparative safety to themselves?—I think it increases the risks of bad results occurring from operations.

73. *The Chairman.*] As a house surgeon you can speak with some degree of certainty?—I say that I think it would increase the risk of bad results.

74. *Mr. Solomon.*] Do you agree or not with Dr. Batchelor when he says that it is impossible for any medical man in any particular case to point to the actual cause of trouble arising after operation?—It is sometimes very difficult.

75. May I say that you can only come to a conclusion from your general experience of the results of your cases?—Yes.

76. We will now turn to your pet subject. I suppose you know something about pathogenic germs?—I have talked about them sometimes.

77. These pathogenic germs are generally in the atmosphere, are they not, and are a source of danger?—They are.

78. It is owing to their presence in the atmosphere, we have been told—and I suppose there is no doubt about it—that septic poisoning arises in an open wound?—Yes, undoubtedly.

79. And in a bad atmosphere, as, for example, in this room, these pathogenic germs are generally present?—Yes, and are freely distributed.

80. It is their concentration or diffusion which increases to an appreciable extent the risk, or the reverse, of danger of infection?—The greater the number in which the germs are present the greater is the chance or risk of septic infection.

81. In a badly-ventilated atmosphere, would the germs be present in greater or lesser concentration?—They would be, presumably, present in greater concentration.

82. In a general surgical ward, such as we have in the Dunedin Hospital, where there are suppurating wounds, are these germs given off into the atmosphere?—Yes. In what is given off from the dry discharges the pathological atoms exist, though they are not capable of actual determination. I think the germs come more from the dry discharges than from the discharge itself, although they exist in large quantities in the matter which comes from a suppurating wound.

83. So that patients lying in a general surgical ward in which there are cases of suppurating wounds run a distinct risk of infection from these septic germs?—Yes; they run a greater risk where the germs are present in greater quantities.

84. Some diseases are more favourable for the multiplication of germs than others, are they not?—Yes.

85. Which should you say would be the most favourable?—As a general rule, open wounds; I should think wounds which are difficult to keep dry, such as operations performed within the vagina.

86. Are they moist or dry?—Moist. All wounds are moist when first made, but are kept dry by reason of absorbent dressings.

87. Do you consider that patients undergoing gynecological operations are more or less likely to incur the danger of septic poisoning?—Speaking generally, I should consider gynecological cases more liable to septic poisoning than other cases. There are certain operations which are possibly not more serious than ordinary operations; but in gynecological cases, where we operate through the passages or the abdominal cavity, the risk is certainly greater.

88. There is no doubt that these germs can be taken from these wounds into the blood system?—No. A healthy body contains no pathogenic germs.

89. Now, we know, as a matter of fact, that in the general surgical ward of this Hospital, where all sorts of cases occur, it is the custom to keep patients for a few days prior to being operated on for gynecological cases, and to remove them back to that ward after having been operated on for vaginal or uterine complaints. Under these circumstances, should you say that greater or lesser precautions are necessary in regard to the hygienic condition of the ward?—Greater precautions are necessary, and risks should be diminished as much as possible.

90. With your actual experience of the Hospital, and taking all these circumstances into con-